Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

December 9, 1957

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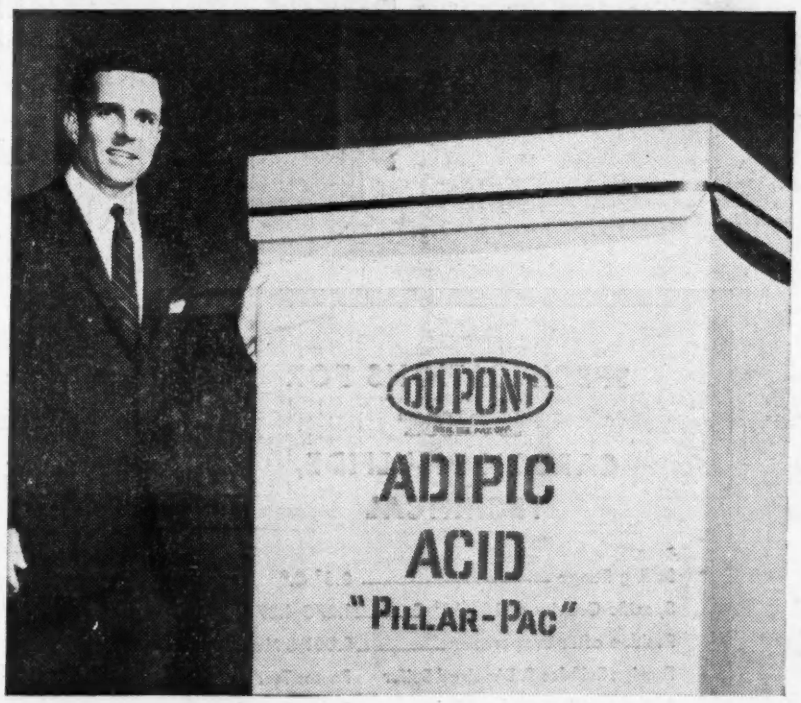

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Oil, Paint and Drug Reporter

Vol. 172 No. 24 30 Church St., New York 7, N. Y. December 9, 1957

Chemical Ills to Hang On

The chemical business is not likely to recover from its present ills in the coming year, but the long-term prospects for the industry remain bright, says "The Value Line Investment Survey," published by Arnold Bernhard & Co.

Costs are moving up and, just as in 1956, it is not going to be easy to raise prices. Competition is strong, and the chemical producers have more-than-adequate plant capacity.

Moreover, overall demand for chemical products will probably weaken, in view of the general business decline now in progress. Profit margins will remain under pressure from increased wage costs and higher freight rates, the report adds.

Touching on the future, the report says some of the new plants may be partially idle for a year or two, but long-term economic expansion will lift demand into line with capacity by the 1960's.

The survey points out that much of the overvaluation in chemical stocks previously in evidence has now been corrected. The investor with his sights trained on long-term capital growth can again find good hunting in the chemical group, it says.

It has been demonstrated in the past two years that substantial overcapacity exists in many sectors of the chemical industry. The reason for this is simple. Too much plant has been brought in over the recent past, the report goes on.

Why have producers expanded at such a rapid rate, then? Did they overestimate their markets? This is probably part of the reason but it is applicable only in a limited sense.

Each company, with an eye to the future, is expanding individually. Chemical executives don't wish to be "caught short" again as they were in the early Fifties. A certain amount of over-capacity will be accepted to keep pace with the rest of the industry, the survey adds.

Gov't Views on Foreign Trade Are No Secret to Chemical Men, Who Are All Primed for Friday

When the chemical industry sends its representatives to Washington on Friday for a special study session on foreign trade they will be all primed with an advance knowledge of how the administration thinks on tariffs and the Organization for Trade Cooperation. Their knowledge will come from the confirmation last week of two long-pending rumors: The administration wants authority to cut import tariffs another 5 percent and will again urge United States participation in the OTC.

The views of the administration were crystallized, it was learned, following a conference between the President and congressional leaders on defense and foreign policy.

Four Chemical Representatives

The views of the chemical industry will be offered Friday at a house ways and means committee's study session when four chemical men will participate in a panel on "The Chemical Industry and Foreign Trade Policy."

Their opinions will be presented at a time when the administration's foreign trade program is getting its first congressional going-over at the hands of the study committee which next year must wrestle with the question of extending the trade agreements law.

Representing the chemical industry will be: Thomas D. Cabot, president of Godfrey L. Cabot Company, Boston; Richard F. Hansen, chairman of the international trade and tariff committee of the Manufacturing Chemists' Association; T. G. Hughes, president of Oronite Chemical Company, San Francisco, and P. K. Lawrence, chairman of the international commercial relations committee of the Synthetic Organic Chemical Manufacturers' Association.

Both the MCA and the SOCMA submitted papers to the compendium on foreign trade policy which the committee made public in October (OPD, 10/14/57), and the testimony to be presented next week will amplify the points contained in these statements.

The administration's decision to seek new tariff-cutting authority was not surprising. When congress last extended the life of the trade agreements law, it granted authority to reduce tariffs 5 percent a year over the three-year period. This authority has been exhausted and officials see little use in extending the law if new powers to reduce tariffs do not go along with the extension.

But it is certain to be touch and go in congress whether the authority will be

—Continued on page 75

MARKETING VICE-PRESIDENT: Norman E. Hathaway, elevated from general sales manager to marketing vice-president and director of Oronite Chemical Company, San Francisco.

Borane-Based Solid Rocket Fuels Due to Blast Off During Next Year

Decaborane-based solid rocket fuels are now being developed by Callery Chemical Company. What's more, Dr. William H. Schechter, vice-president of operations for the Callery, Pa., firm, says that there should be enough fuel available to prove the company's contention that solid borane fuels are next-best to atom power within the next year. It is Callery's intention, according to Dr. Schechter, to lock the most efficient chemical propellants, boron-hydrogen-carbon compounds, in solid form.

The significance of the development, he says, is that it will combine the most efficient type chemical fuel with the most efficient rocket design, since a rocket with solid propellant requires no fuel transfer mechanism.

Simplicity of Operation

Dr. Schechter points out that the fuel could be cast as a solid, mixed with a suitable oxidizer, such as ammonium perchlorate, held in combination by butadiene or some similar material.

"It would burn like a cigarette," he explains, eliminating bulky metering and pumping systems required in rockets now for liquid fuels and oxidizers, which must be kept separate until united in the combustion chamber. Thus a greater weight of fuel could be packed in.

Thiokol Chemical Company, Trenton, N. J., manufactures solid rocket motors based on a similar principle, using hydrocarbon fuels cast in place with oxidizers.

While Dr. Schechter declares that Call-

—Continued on page 67

IN KEY FMC SALES POST: Alfred T. Loeffler, vice-president of Food Machinery & Chemical Corporation, New York, who has been given functional responsibility for the marketing activities of FMC's chemical divisions.

Geraniol Is Being Made Synthetically

Geraniol is now being produced synthetically. Glidden Company, Cleveland, Ohio, is now offering it commercially as the result of a research program initiated twelve years ago, Dr. W. David Stallcup, vice-president in charge of the company's southern division, has announced.

The importance of this scientific and technological achievement will be evident to perfumers everywhere since it represents a milestone in the long history of aromatic chemical production, Dr. Stallcup reported. He said the firm's research

—Continued on page 70

US Rubber to Enter Polyethylene Yarn Field

United States Rubber Company, New York, will enter the polyethylene yarn business as a producer and seller before the end of the year. This will be the first time the company, which has been in the textile business since 1917, has become a producer of plastic yarns.

The new yarn will be produced at Providence, R. I., in a plant of the company's footwear and general products division. The textile division will be responsible for sales. Sales headquarters will be at 1230 Avenue of the Americas, New York.

The company said it decided to enter the polyethylene yarn business because its market research studies had convinced it that this business has tremendous growth potential, and that there will be room for another manufacturer of top quality polyethylene yarns.

Epoxy Liquid Resin Unit To Be Built by Bakelite

A new plant that will provide a major increase in the production of "Bakelite" liquid epoxy resins is to be built at Marietta, Ohio.

The newly-authorized facilities, scheduled for commercial operation early in 1959, will have a rated annual capacity of 15 million pounds of epoxy resins.

Plant construction and operation, as well as sales and technical services connected with the promotion of these materials, will be handled by Bakelite Company, New York, a division of Union Carbide Corporation.

Montecatini Set to Boost Output of Polypropylene

Montecatini Societa Generale, Milan, Italy, plans to boost its production of polypropylene within the next few months. Montecatini is already turning out the isotactic polymer, tradenamed "Moplen," at a 15 million pound-per-year clip at its Ferrara, Italy, plant.

The Italian firm has also come up with a new textile application for its thermoplastic—a "Moplen"-wool blend—which it displayed at the Chemical Industries Exposition in New York last week.

Propylene Marketing Projected by Sinclair

Sinclair Chemicals, Inc., New York, a subsidiary of Sinclair Oil Corporaton, will expand its petrochemical activities by marketing high-purity propylene, produced at a new petrochemical plant at the Marcus Hook, Pa., refinery of Sinclair Refining Company.

The new facility, which will shortly be in full scale operation, represents Sinclair's latest move in the upgrading of refinery products into more valuable petrochemical materials.

The plant will be the first high-purity

—Continued on page 66

Carbinol Unit Added, van Ameringen Reports

A new Grignard reaction production unit to manufacture carbinols has just been completed by van Ameringen-Haebler, Inc., at its Union Beach, N. J., synthetic aromatic chemical plant.

The added facility will more than double the company's capacity to produce such organics as dimethyl phenyl ethyl carbinol and related compounds. The project is a part of the company's $1.5 million expansion program at its Union Beach plant.

FDA Set for Additives Law—If Congress Passes It

The Food and Drug Administration is all set to handle a food additives control law, should congress get around to enacting one.

FDA says it is well equipped with the advanced scientific knowledge for determining the toxicity factor of proposed chemical additives, on which it would necessarily base its enforcement policies.

Much of its data has accumulated over the years in the normal operations of the agency in the field of adulterated food and drug products, but much more is now being learned through the specialized research on tolerances found essential in the enforcement of the Miller pesticide law.

Officials recognize that the problems that will arise in the area of chemical additives controls will probably be many times those that have arisen in connection with the pesticide control law, but the way will be made easier by the experience gained under the Miller law because much of the data on methods and analysis will be adaptable to the chemical additives tests.

Of the many chemical additives control bills pending in congress, they all have one thing in common with the Miller pesticide law: they propose to modify the so-called "per se" doctrine which holds that any poisonous or deleterious chemical not normally present in food shall be considered "per se" an adulterant unless it is necessary, in favor of establishing tolerances that are recognized to be safe.

In petitioning the FDA for the right to market an additive for use in foods,

—Continued on page 66

FDA Gives Clue to Thinking Via Informal Policy Statements

Food and Drug Administration's thinking on a wide variety of subjects—ranging from quaternary ammonium compounds in foods to use of the term "infant" in drug labeling—emerges from a batch of informal policy statements inserted in last week's *Federal Register*. First of a series which the agency plans to publish from time to time under its new advisory information service (OPD, 12/2/57), the round-up is based on topics chosen primarily from letters written by FDA officials in response to inquiries from the food, drug and cosmetic industries.

Quaternary ammonium compounds are regarded by the agency as "poisonous and deleterious substances" and therefore, it says, FDA will consider foods containing these materials as adulterated under the federal food, drug and cosmetic act.

What Is an Infant?

What is an infant? Apart from its rules for special dietary foods which define an infant as a child not more than twelve months old, FDA hasn't yet made up its mind. To drug manufacturers wondering what to do about its labels under the circumstances, the agency gives this advice:

"Until the term is more precisely defined by legislation or formal regulation, where the exact meaning of the term is significant, manufacturers should qualify any reference to 'infant' to indicate whether it refers to a child who is not more than one year of age, or a child not more than two years of age."

Outdated drugs, the agency warns, should not be moved through commercial or charitable channels unless they have been assayed to establish potency and recertified.

Here are some of FDA's other wide-ranging views:

- Pyroligneous acid may be used in foods, if it is sufficiently pure for that use, does not conceal damage or inferiority or make the food seem better or of greater value than it is.
- Sprout inhibitors are not classified as pesticides and, therefore, tolerances for their residues cannot be established under the Miller pesticides law. However, if the residues are poisonous, tolerances

—Continued on page 67

ADVANCED BY SHELL CHEMICAL: R. K. Burns, manager of its treasury department, who has been named by Shell Chemical Corporation, New York, to be assistant controller, assistant treasurer and assistant secretary, effective January 1.

Imperial, Ltd., S-W Agree on Color Sale

Aiming at a larger chunk of dry color business in Canada, Imperial Paper & Color Corporation (Canada), Ltd., has entered into an agreement to take over the dry color operations of Sherwin-Williams Company of Canada, Ltd.

The St. Johns, Que., firm will buy the dry color manufacturing facilities, good will, customer lists and manufacturing procedures for dry colors of the S-W Canadian subsidiary.

Sherwin-Williams will discontinue all dry color operations and Imperial will move the equipment it has purchased to its new St. Johns color plant.

The move will not affect in any way Sherwin-Williams' domestic pigment color operations, which will continue to operate throughout the United States.

The purchase does not include any other activities of Sherwin-Williams of Canada.

Imperial Paper, Ltd., is a subsidiary of Imperial Paper & Color Corporation, Glens Falls, N. Y. Sherwin-Williams, Canada, is a subsidiary of Sherwin-Williams Corporation, Cleveland, Ohio.

Methallyl Acetate Offered By FMC Organics Division

Methallyl acetate (isobutenyl acetate) is now readily available in a 97 percent minimum purity grade from the FMC organic chemicals division of Food Machinery & Chemical Corporation, New York.

Methallyl acetate is used primarily as a monomer in polymerization reactions. It is also expected to be of interest in preparing methallyl derivatives of value in specialty rubbers, safety glass liners, molding powders, castings and laminates, adhesives, protective coatings, polymers, pharmaceuticals, insecticides and specialty chemicals.

Already producing methallyl chloride in tonnage quantities, and methallyl alcohol in 98 percent purity, the FMC division currently offers methallyl acetate at an introductory price of $1 per pound.

The Week's Price Changes

DDT, Geranium and Corn Oils, Copra Prices Quoted Higher. Lead, Litharge, Platinum, Selenium, Mineral Orange Decline.

Prices Advanced

Almond oil, sweet, 10c. per lb. (p. 62).
Candelilla wax, 1c. per lb. (p. 66).
Celery seed, French, 1c. per lb. (p. 62).
Indian, 2½c. per lb.
Cocoa butter, 1c. per lb. (p. 68).
Coconut oil, crude, ½c. per lb. (p. 68).
Copra, $5 per ton, (p. 68).
Coriander seed, Moroccan, ½c. per lb. (p. 62).
Corn oil, crude, ⅜c. per lb. (p. 68).
Refd., ⅜c. per lb.
Cottonseed meal, $1 per ton (p. 68).
Cottonseed oil, crude, ¼c. per lb. (p. 68).
Refd., ¼c. per lb.
DDT, 2c. per lb. (p. 45).
Egg albumin, flake, 12c. per lb. (p. 48).
Yolk, 7c. per lb.
Ginger, Jamaica No. 3, 1c. per lb. (p. 62).
Nigerian split, 1c. per lb.
Geranium oil, Algerian, 50c. per lb. (p. 62).
Bourbon, $1 per lb.
Lemongrass, 30c. per lb. (p. 62).
Lime oil, West Indian, 10c. per lb. (p. 62).
Linseed meal, 50c. to $1 per ton (p. 68).
Molasses, New Orleans, 1c. per gal. (p. 46).
Oleostearine, 1c. per lb. (p. 68).
Peanut oil, crude, ¼c. per lb. (p. 68).
Refd., ¼c. per lb.
Rosemary oil, 5c. per lb. (p. 62).
Sassafras oil, natural, 25c. per lb. (p. 62).
Spearmint oil, 15c. per lb. (p. 62).
Sulfur, imp., Mexican, $1 per long ton (p. 40).
Tin, ½c. per lb. (p. 40).
Salts, 4 10c. to 2½c. per lb.

Prices Reduced

Antimony oxide, 2½c. per lb. (p. 64).
Bois de rose oil, Peruvian, 15c. per lb. (p. 62).
Castor oil, dom., ½c. per lb. (p. 68).
No. 1 Brazilian, ¼c. per lb.
Cinnamon, Ceylon No. 2, 1c. per lb. (p. 62).
Cod oil, ½c. per lb. (p. 68).
Cumin seed, 1c. per lb. (p. 62).
Cumin seed, 1c. per lb. (p. 62).
Ginger, Cochin, Dec./Jan., 1c. per lb. (p. 62).
Lead, ¼c. per lb. (p. 40).
Lead oxide, ½c. per lb. (p. 64).
Litharge, ½c. per lb. (p. 64).
Mineral orange, ½c. per lb. (p. 64).
Molasses, New York, 2c. per gal. (p. 46).
m-Nitro-p-toluidine, 16c. per lb. (p. 50).
Nutmeg oil, 75c. per lb. (p. 62).
Pimento, 1c. per lb. (p. 62).
Platinum, $3 per oz. (p. 40).
Selenium, $3 per lb. (p. 40).
Tung oil, ½c. per lb. (p. 68).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Dec. 6, 1957	Nov. 29, 1957	Dec. 7, 1956
108.68	109.26	109.56

Chemical Exports Pretty Good

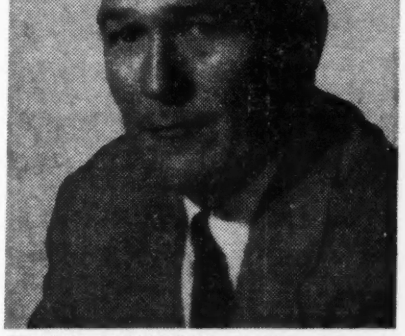
Export business in the chemical field was pretty good during the first nine months of the year, says the Bureau of Census. Specifically, it was about 10 percent above the level of the comparable period a year ago. The import figure for the first three quarters of 1957 was also higher than that of the previous year, but in that case only by a slight amount. How much of the increases are due to dollars value increases are not shown by the bureau.

It estimates exports during the first nine months at $1,054,000,000 as against the total for the same period last year of $944.3 million. Imports this year have amounted to $207.9 million against $204.7 million in 1956.

During September exports declined sharply from those of August—even falling slightly behind those of September last year. September exports were $105.5 million, a drop of $13.5 million from the August value of $119 million, and compared with the September, 1956, total of $108.7 million.

Imports also fell back slightly; the figures being $21 million for September against $23.3 million in August and $18.6 million in September last year. Declines

—Continued on page 60



GENERAL PURCHASING AGENT: Robert L. Lozon, appointed general purchasing agent for the Glidden Company, Cleveland, Ohio.

Polyester Foam Resins Developed by Pitts. Plate

A series of unique low-cost polyester foaming resins said to possess superior characteristics for the manufacture of urethane foamed products has been developed by Pittsburgh Plate Glass Company, Pittsburgh, Pa., and will be immediately added to the company's regular line of foaming resins.

The resins, to be known as "Selectrofoam Resin 6207" (for flexible foamed products) and "Selectrofoam Resins 6004" and "6005" (for rigid products) are said to be superior in many ways to previous polyester and polyether foaming resins.

Babbitt Elects President

B. T. Babbitt, Inc., New York, has elected Marshall S. Lachner president and chief executive officer of the firm. In addition to these duties, Mr. Lachner was appointed a member of the board of directors and the executive committee.

Index to News and Market Reports

Association News

Chemists' Club Book Out 7
Drug Session Briefed on Industry 7
N. E. PVLA Party Slated 71
SAACI Committee Names Roberts 7
SOCMA Again Names Hooker 7
Western Chemical Group to Meet 42

Government News

Alcohol Change Rule Announced 58
Antibiotic Rules Amended 7
Atomic Secrets Plan Proposed 7
Cancer Research Rules Favor Public First. 5
Chemists Failing With Housefly 7
Commerce Secretary Appoints 44
Fatty Acid Output Up 67
FDA Gives Clue to Thinking 4
FDA Okays Tolerances 70
FDA Set for Additive Laws 3
Flaxseed Minimum Dropped 70
FMC Names Loeffler 3
Gov't Tariff Views Confirmed 3
Oil Position Filled 59
Oilseeds, Cake and Meal Output 57
Soap Sales Reach Record 44
Wyoming Governor Heads Commission .. 58

Industry News

Adipic Acid Handled a New Way 7
American Can to Expand 42
Ammonia Gains Predicted 53
Beryllium Plant Gets Help 75
Borane-Based Solid Fuels Due 3
Carbinol Unit Added 3
Chemicals to Double Aluminum Use 5
Chemical Ills to Hang On 3
Chemical Offices Borrow Lab Technics ... 5
Epoxy Unit to Be Built 3
Ethylene Pipeline Ready 5
Geranoil Being Made Synthetically 3
Magnesium Methoxide Made 5
Methallyl Acetate Offered 4
Nat'l Distillers Buying Partner 5
Polyester Foam Resins Developed 4
Propylene Marketing Projected 3
Scott Develops Urethane Foam 5
Scarle Has Tranquilizer 58
Sun's Holders Approve Merger 5
US Rubber to Make Yarn 3

International News

Ames, Canada, Elects 43
Boron, Lithium Discovered in USSR 5
Chemical Exports Pretty Good 4
Chemical Industry in India Booming 7
Cyanamid, Dutch, Plan Catalyst Venture. 5
Dutch Firm to Start Up New Plant 5
Imperial, S-W, Agree on Color Sale 4
Koppers Gets ICA Aid 53
Montecatini to Boost Polypropylene Output 3

Personnel News

Arizona Chemical Names Davis 7
Babbitt Elects President 4
Benjamin Moore Shifts Personnel 71
Cyanamid Names Holland 5
Cyanamid Unit Picks Manager 67
DuPont Unit Makes Changes 43
Gen'l Mills Names Weber 44
Glidden Appoints Lozon 4
Naugatuck Names Tuley 42
Oronite Makes Hathaway Market V.P. 3
Shell Chemical Advances Burns 4
Union Carbide Olefins Names Williams .. 5

Market Reports

Acids 40
Agricultural Chemicals 45
Aliphatic Organics 46
Aromatic Chemicals 62
Botanical Drugs, Gums 55
Coal Chemicals 50
Coatings Materials 64
Drugs 55
Essential Oils 62
Fats and Greases 68
Fertilizer Materials 45
Fine Chemicals 55
Heavy Chemicals 40
Industrial Organic Chemicals 46
Lacquer Materials 64
Leather Chemicals 48
Naval Stores 64
Oil Cake and Meal 68
Oils 68
Paint Materials 64
Pesticides 45
Petrochemicals 46
Petroleum Derivatives 49
Protective Coatings Materials 64
Spices 62
Textile Chemicals 48
Waxes 68

General Features

Advertisers Index 75
Association Meeting Dates 7
Bids Wanted 74
Bookshelf 61
Classified Advertisements 74
Consulting Chemists and Engineers 58
Coal Chemical Output 50
Crude Oil Stocks 49
Current Market Quotations 9
Data offered 59
Editorials 38
Imports 60
Jobs & People 74
Obituaries 44
OPD Price Index 4
Washington Talks It Over 38

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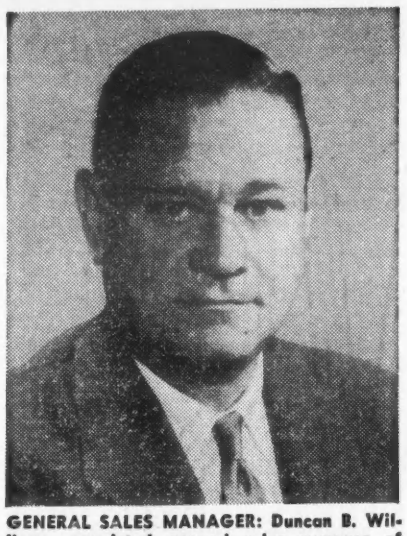

GENERAL SALES MANAGER: Duncan B. Williams, appointed general sales manager of Union Carbide Olefins Company, a division of Union Carbide Corporation, New York.

Cyanamid, Dutch Firm Plan Catalyst Venture

American Cyanamid Company, New York, and a company in Amsterdam, Holland, are planning a joint venture to manufacture certain types of platinum reforming catalyst for sale to the oil industry.

The Dutch company is Koninklijke Zwavelzuurfabrieken v/h Ketjen N. V. The joint enterprise will be known as Cyanamid-Ketjen N. V. and will locate its new plant in Amsterdam on a site adjoining Ketjen's present facility. It is expected to be in production before the first of the year.

Ownership of the new company will be shared equally by Cyanamid and Ketjen, the initial investment of each to approximate $1.2 million.

Ketjen manufactures sulfuric acid, saccharin, certain petroleum cracking catalysts and a variety of other chemicals. Cyanamid said the project represents part of its announced capital outlay program scheduled for 1957-58.

Platinum reforming catalysts find their principal use in the conversion of lower grade fuels into high octane gasolines.

Dutch Soda Ash Firm To Start Up New Plant

Dutch Soda Ash Company, Ltd., plans to get its soda ash factory at Delfzijl, the Netherlands, running at the end of this year. The installation was engineered in cooperation with Diamond Alkali Company, Cleveland, Ohio.

Dutch Soda Ash Company's management is in the hands of Royal Dutch Salt Industry, Ltd., which is now constructing an electrolysis plant adjacent to the soda ash factory. The parent firm is also considering building a vacuum salt installation at the Delfzijl site.

When these works are completed, Royal Dutch says, a favorable combination of plants consuming steam and electricity will be achieved, thus adding to the overall economies of the new industry.

Sun's Holders Approve Ansbacher-Siegle Merger

Stockholders of Sun Chemical Corporation, Long Island City, N. Y., have approved purchase of Ansbacher-Siegle Corporation, Rosebank, N. Y.

The approval means that Ansbacher-Siegle will now be operated as a fully integrated part of Sun Chemical.

Cancer Research Regulations Specify That Public Comes First In Assigning of Patent Rights

The public comes first in the disposition of patent rights on drugs developed under the government's cancer chemotherapy program. That is what the Department of Health, Education and Welfare says in its new set of rules. Coming under the revised regulations are the pharmaceutical and chemical firms that are taking part in the research program of the National Institutes of Health. HEW considers that the public interest will best be served if the research advances are made freely available to the government, to science, industry and the general public.

HEW points out that the gains will be made through the use of public money. All such achievements, therefore, HEW says, must be reported to the government authorities, who will decide how the rights to the discoveries will be handled. The government can, it is pointed out, require assignment of the rights to the United States or dedication to the public.

Certain Exceptions Are Permitted

Because of the peculiar exigencies of the cancer chemotherapy program, however, and in order that the resources of pharmaceutical and chemical firms may be brought into the program, certain exceptions to general department policy will be permitted in the negotiation of industrial contracts for this program.

These contracts may contain either (1) the standard patent clause, reserving to the Surgeon General the right to determine the disposition of inventions arising from the performance of the contract, or (2) standard alternative clauses developed to give effect to certain criteria. The alternatives will be drawn in the negotiations with the contracting companies, but they will follow these basic objectives:

- The availability of information concerning the results of research and the right, without undue delay, to make disclosures to the extent essential to serve the research need.
- The availability for development and use for health purposes, on reasonable terms, of inventions arising from the research contract, whether actual development and production is to be made by the contractor himself or by others.
- Sustained concentration on the anti-cancer objective of all resources mobilized for the purposes of the contract.

The new policies replace the broad statement of basic policy on patents, which the department announced in September, 1955, by spelling out in detail the rights of the companies, contracting to perform the research, to the products

—Continued on page 53

Boron, Lithium Deposits Unearthed in Soviet Union

The Soviet Union has discovered major deposits of boron and lithium ores. Both materials are used as bases for exotic fuels in chemical rocket engines.

Academician A. Topchiev, secretary of the Soviet Academy of Sciences, reports that Soviet geologists have found a lithium deposit in the Kola Peninsula in northern European Russia, which increases the known lithium deposits in the Soviet Union "a thousandfold."

Academician K. I. Satpayev, president of the Kazakh Academy of Sciences, reports that the major Soviet deposits of boron ores discovered in recent years are concentrated in Kazakhstan.

The importance of the new boron discoveries in Kazakhstan is indicated by the fact that earlier surveys of Soviet resources of boron compounds had raised questions about the adequacy of resources of this element even for traditional uses, let alone rocket fuels.

ASS'T GENERAL MANAGER: William D. Holland, appointed assistant general manager of its commercial development division by American Cyanamid Company, New York.

National Distillers Buying Out Partner

National Distillers & Chemical Corporation, New York, will soon be the sole owner of National Petro-Chemicals Corporation, a subsidiary in which it now holds a 60 percent interest. National Distillers will give its partner, Panhandle Eastern Pipe Line Company, a bloc of 1.5 million shares of its common stock in exchange for Panhandle's interest in the subsidiary.

Directors of National Distillers and National Petro announced approval of the plan last week. The transaction will be completed before the end of the year.

National Petro owns and operates a large petrochemical plant in Tuscola, Ill., and recently anounced the construction of a second polyethylene plant in Houston, Tex.

John E. Bierwirth, president of National Distillers, and W. P. Maguire, president

—Continued on page 53

Scott in Chemical Field With New Urethane Foams

Scott Paper Company, Chester, Pa., will enter the chemical field with a new type of urethane foam for insulation, cushioning, filtration, and other household and industrial uses.

The new foam, on which the company has patents pending, is available in several types. In addition, the soft varieties of the new foam, called "Scottfoam," have greater tensile strength and elongation than conventional urethane foams, and a wool-like feel and drape not found in any other foams, it is said. More rigid types, available in a wide range of pore sizes, have exceptionally high permeability and show promise as a filtering material.

Ethylene Is Set To Move Shortly Via New Pipeline

Contractors are putting the finishing touches on the first interstate pipeline ever built to transport ethylene. The line will soon link the Lake Charles, La., plant of Petroleum Chemicals, Inc., and two of its contract customers—E. I. duPont de Nemours & Co. and Spencer Chemical Company—in Orange, Tex.

PCI is completing a plant capable of producing 200 million pounds of ethylene annually by cracking gases delivered from adjacent petroleum refineries of Cities Service Oil Company and Continental Oil Company.

According to PCI, its ethylene facility is designed in such a way that it is readily expandable to 300 million pounds a year, area.

Pipeline Stretches 30 Miles

The ethylene pipeline is constructed of 6⅝-inch pipe and stretches thirty miles across Louisiana farm and marsh land. The line crosses several navigable canals and bayous as well as the Sabine River, forty-five feet deep and 1,200 feet wide at the point of crossing.

Bruce K. Brown, PCI president, said pipeline construction presented special problems. Pipe for the line had to be heavy enough not to float in the mud but light enough not to sink further in the ooze and thus place additional stress on the pipe.

A special coating of hot enamel, wrapped fiber glass, asphalt impregnated felt and heavy wrapping paper encases the pipe.

Ethylene is sold by the pound but transported and measured in a gaseous state. The chemical will be placed in the pipeline at Lake Charles at a pressure of 1,000 pounds per square inch and delivered at the other end at 450 pounds per square inch. This will permit the line to serve as a storage facility.

When deliveries are small, the ethylene can be packed to 1,000 pounds per square inch pressure and thus provide extra capacity for times of large deliveries or for occasions when the Lake Charles plant is not operating for short periods.

Special communications equipment will maintain constant contact between the Orange terminal and Lake Charles.

Chemical Process Industries Could Double Aluminum Use

Reynolds Metals Company, Louisville, Ky., predicts that chemical process industries will almost double their consumption of aluminum by 1960.

W. B. Moore, manager of the company's chemical and petroleum market, made the forecast at the opening of the twenty-sixth Exposition of Chemical Industries at the New York Coliseum last week.

The Reynolds exhibit at the exposition depicts the growth of aluminum use in the chemical process industries.

The exhibit displays eight major appli-

—Continued on page 71

Magnesium Methoxide Made

Anderson Chemical Company, Weston, Mich., is now producing magnesium methoxide in commercial quantities. Anderson says the chemical has applications in drying alcohols, preparation of stable gels, catalytic condensation of carbonyl compounds, and coating of steel for dielectric properties.

Aerosol Shoe Polishes Facing a Shiny Future

A shiny future is in prospect for aerosol packaged shoe polishes, says E. I. duPont de Nemours & Co., Wilmington, Del.

Americans spent upwards of $60 million last year on shoe polishes, with about 2 percent of the purchases going for the relatively new spray-on materials. DuPont says this represents a healthy growth. Available only in the last year or two, the aerosol polishes have been tried by half the people who heard of them. The satisfaction rate is reported high—six to one over other types.

Chemical Front Offices Borrowing Technic From Labs

The chemical industry is borrowing the technic of scientific research from the laboratory and putting it to work in the front office. The procedure is called operations research (OR) and is said to solve practical business problems around the council table as well as it does scientific problems in the labs.

The American Management Association says that chemical companies account for the largest percentage of users of this new research method. Specifically, out of 115 firms queried, sixty-five chemical firms said they used the system. This amounts to 56.5 percent.

What's more, the procedure seems to be catching on steadily, for another thirty firms said they intend to use it in the future. Another twenty are still holding out, saying they do not intend to use it at present.

How well does OR work? Better than one out of four firms that use it say it works for them. The bulk of these say it saves a great amount of money. Others find it improves procedures. Some forty-five firms still have their eye on it, but say it is too early to venture on opinion.

The biggest use of OR appears to be in production. Next is in inventory operations. Sales and manufacturing departments run neck and neck with the long-range planning departments to come in as the third biggest users of the system.

Transportation and shipping officials follow as converts to the system, and after them come the research men. The accountants also find it valuable, for more than half of those queried said they were OR users. And the finance departments were right behind them.

The advertising and purchasing people found the new system about equally valuable in their work, the survey shows, and after them came the personnel departments.

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SODIUM ASCORBATE
SODIUM ASCORBATE COATED
SODIUM ISOASCORBATE
THIAMINE HYDROCHLORIDE
THIAMINE MONONITRATE
VITAMIN A ACETATE
VITAMIN A PALMITATE
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DRY VITAMIN A ACETATE and D-2 MIXTURES
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Association Meetings

Agricultural Ammonia Institute, annual convention and trade show, Marion hotel and Robinson Memorial Auditorium, Little Rock, Ark., December 11-13.

American Institute of Chemical Engineers, annual meeting, Conrad Hilton hotel, Chicago, December 8-11.

American Pharmaceutical Manufacturers Association, combined midyear and eastern section meeting, Waldorf-Astoria hotel, New York, December 9-11.

Chemical Industry Association, monthly meeting, Chemists' Club, New York, December 10.

Chemical Specialties Manufacturers Association, annual meeting, Hollywood Beach hotel, Hollywood Beach, Fla., December 9-11.

Society of Cosmetic Chemists, annual meeting, Commodore hotel, New York, December 10.

Society of Plastics Industry, vinyl film and sheeting conference, Commodore hotel, New York, December 10-11.

Toilet Goods Association, scientific section, Waldorf-Astoria hotel, New York, December 9.

American Association for the Advancement of Science, national meeting, Indianapolis, Ind., December 26-31.

American Chemical Society, national meeting, San Francisco, April 13-18.

American Drug Manufacturers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 25-29.

American Pharmaceutical Manufacturers Association, central section meeting, Edgewater Beach hotel, Chicago, February 10-12; western section meeting, Ambassador hotel, Los Angeles, February 17-18; annual meeting, Boca Raton Club, Boca Raton, Fla., April 14-16.

Association of American Soap and Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 22-24.

Chemical Industry Buyers Group of National Association of Purchasing Agents, Congress hotel, Chicago, January 23.

Chemical Market Research Association, joint meeting with Chemical Industry Buyers Group of National Association of Purchasing Agents, Sheraton-Park hotel, Washington, D. C., February 6; annual meeting, Statler hotel, New York, May 20-21.

Compressed Gas Association, annual meeting, Waldorf-Astoria hotel, New York, January 20-21.

Drug, Chemical and Allied Trades section of New York Board of Trade annual banquet, Waldorf-Astoria hotel, New York, March 6.

Essential Oil Association, annual meeting Savoy Plaza hotel, New York, January 10.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-14.

Society of Chemical Industry, American section, Perkin medal dinner, Waldorf-Astoria hotel, New York, January 10.

Society of Plastics Industry, reinforced plastics conference, Edgewater Beach hotel, Chicago, February 4-6.

Atomic Secrets Give-Away Plan To Aid Allies of the Free World Is Proposed by MCA President

The United States must give away some of its atomic secrets, says John E. Hull, president of the Manufacturing Chemists Association. The top-drawer data of the Atomic Energy Commission must be made available to our allies in the free world, he says, if we are to come out on top in our technological race with Russia. He adds: "What we are doing now is keeping classified information from our friends, information which the Russians already have."

Mr. Hull made his statements at the annual Awards Dinner of the Chemical Profession of Cleveland last week in the Carter hotel, Cleveland, Ohio.

Urges Sharing With Scientists

Here is something else he had to say: "There is one thing we can do that will materially strengthen our position. That is to share some of our atomic secrets with the scientists of the free world. If we combine the scientific and technological talent of the rest of the free world with our own, Russia won't be playing in the same league.

"If we fall into a 'Fortress America' philosophy we are doomed. Military aid is for defense. Economic aid serves both defensive and constructive purposes. It is not a giveaway program and it is not visionary. No investment we make pays greater dividends than reasonable amounts of economic aid to friendly nations."

Mr. Hull said indications are that "the Russians are graduating twice as many scientists and engineers each year as we are. They have scientists of the highest quality."

The United States faces an increasing shortage of qualified scientific personnel, he went on, unless additional steps are taken to prevent it.

We must not permit the "relatively soft life we have" to obscure "the hazard under which we live," Mr. Hull warned. He was quick to add, however, that we are not "completely defenseless."

On the credit side he listed: The Strategic Air Command, the Jupiter and Thor missiles, the quality of our scientific cadre, and the contributions and capabilities of American industry as examples of our strength against aggression.

"Since 1901," he pointed out, "we have

—Continued on page 75

R. Wolcott Hooker

SOCMA Again Elects Hooker to Top Post

R. Wolcott Hooker, senior vice-president of Hooker Electrochemical Company, Niagara Falls, N. Y., has again been elected president of the Synthetic Organic Chemical Manufacturers Association. Mr. Hooker was elected at the thirty-sixth annual meeting in New York last week.

At the same time, Samuel G. Baker, general manager of the organic chemicals department of E. I. duPont de Nemours & Co., Wilmington, Del., was chosen first vice-president and Dr. Robert E. Hulse, executive vice-president and general manager of chemical operations for U. S. Industrial Chemicals Company, New York, a division of National Distillers & Chemical Corporation, was chosen second vice-president.

C. K. Egeler, eastern manager of the pigment, color and chemical division of Sherwin-Williams Company, Cleveland, Ohio, was re-elected treasurer of the association for 1958. J. R. Frorer, vice-president of Atlas Powder Company, Wilmington, Del., and R. Kithil, vice-president of Carwin Company, were elected new members of the board of governors.

Dr. Elvin H. Killheffer and Dr. August Merz, past presidents of SOCMA, were re-elected honorary members of the board for one-year terms.

Chemical Industry in India Is Set To Bring Off a Boom of 300 Percent

The Indian chemical industry is set to bring off a boom of 300 percent. Such a mighty achievement, it is said, will be the fruit of the current Five-Year Plan, which will end in 1961, if all goes well. And, say the planners, the country will be able to absorb such a huge increase in output because of three factors: Growing industrialization, a rising standard of living, and greater needs of national health services.

The cost of putting the Five-Year Plan through is something of a problem. Some of the projects may have to be postponed, but it is expected that the basic industrial core will be implemented and that it will include extensive plans for expansion of the chemical industry.

This is the second of two reviews of the Indian chemical industry. Last week's dealt with the immediate past. This deals with the future.

Current production trends indicate that the most important sectors of the basic Indian chemical industry—acids, alkalies and fertilizers—will advance and it is hoped that output of other chemicals will also be increased.

Although production targets for various chemicals do not appear to provide for ex-

—Continued on page 75

TECHNICAL DIRECTOR: John F. Davis, named technical director of Arizona Chemical Company, New York.

Adipic Acid Handled A New Way by duPont

E. I. duPont de Nemours & Co. has a new way of handling adipic acid. The Wilmington, Del., producer of chemicals has developed a one-ton shipping container which, it says, cuts the time and cost of unloading and handling bulk quantities of the acid.

The container, called "Pillar-Pac," will shortly be available to the chemical industry, through licensed manufacturers, not only for bulk shipments of adipic acid but also for other products.

The new non-returnable unit is especially designed for bulk users of duPont adipic acid served by either rail or truck. The company will also continue to package the chemical in fifty-pound bags and in palletized bag units.

Of rugged, corrugated construction, the

—Continued on page 70

Drug Session Is Briefed On the Industry Situation

The National Drug Trade Conference was brought up to date on a number of factors of interest to its membership last week at its meeting in New York, which also marked the election of officers for the coming year.

The topics discussed included: Labeling, manpower, government interference, international regulations and state legislation.

The officers elected were: President, Harold C. Kinner; vice-president, Dr. Rob-

—Continued on page 71

SAACI Committee Names Roberts to Head Its Slate

The nominating committee of the Salesmen's Association of the American Chemical Industry has selected its slate of candidates for 1958, headed by Robert J. Roberts, of Emery Industries, Inc., for president.

Other nominees are: Vice-president, James E. Spencer, Harshaw Chemical Company; treasurer, George W. Poland, jr., E. M. Sergeant Pulp & Chemical Company, and secretary, Preston F. Tinsley, Westvaco Chlor-Alkali Division of Food Machinery & Chemical Corporation.

The following have been nominated as replacements on the board of directors to serve for 1958 and 1959:

Arthur C. Curran, Meer Corporation; Neal M. Draper, National Aniline Division of Allied Chemical & Dye Corporation; Arthur R. Kavaler, OIL, PAINT AND DRUG REPORTER; Sam F. Teague, jr., Monsanto Chemical Company, and M. Testa, jr., Shell Chemical Corporation. The election will be held at the annual installation meeting in January.

Antibiotic Rules Amended

Food and Drug Administration has announced several amendments to its antibiotic regulations. The amendments have to do with penicillin-bacitracin troches; penicillin zinc-bacitracin troches, and streptomycin tablets.

Chemists' Club Prints New Account of Itself

The Chemists' Club, New York, has grown so prodigiously during the past decade that it decided recently to publish a new account of itself.

A book, written by David H. Killeffer, and entitled *Six Decades of the Chemists' Club*, has been turned out because club officials felt that a broader, more up-to-date history was called for.

Leo V. Steck, president, states in his foreword to the book, that for most clubs a formal history every fifty years or so is enough. The Chemists' Club, he points

—Continued on page 75

Chemists Making Almost No Headway vs. House Fly

Chemists are making almost no headway in their fight against the common house fly. Bearer of these unpleasant tidings is G. C. Labrecque, an entomologist in the Department of Agriculture.

According to Mr. Labrecque, who gave out his bad news at a meeting of the Entomological Society of America in Memphis, Tenn., last week, house flies are developing increasing resistance to most of the contact syrays now in use.

The USDA scientist says that tests conducted over the past three years in Florida clearly indicate that flies are becoming more resistant to the widely-used organophosphorous insecticides.

Applied as larvicides, baits, or as surface insecticide residues, the oganophosphorous compounds have been the preferred means of house fly control in poultry houses and dairy barns for the past five years.

These insecticides replaced DDT and other spray materials to which flies had become highly resistant. The organophosphorous compounds to which resistance is appearing include malathion, "Dipterex," "Diazinon," and parathion.

In the most recent experiments, USDA researchers found that house flies collected from eight dairies and six poultry houses in Florida were three to 133 times as resistant as normal flies to malathion sprays.

The insecticide specialists also learned

—Continued on page 52

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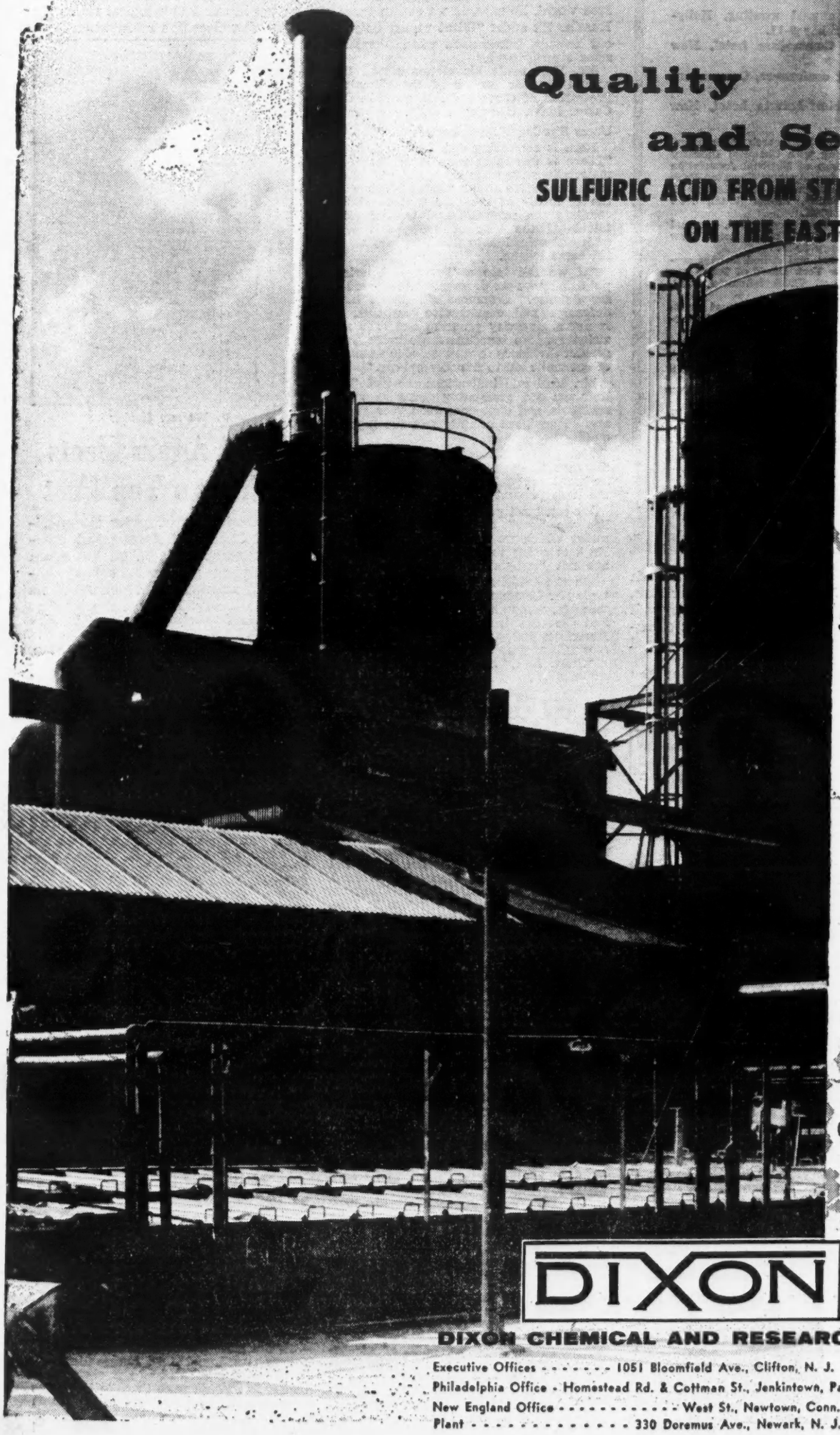

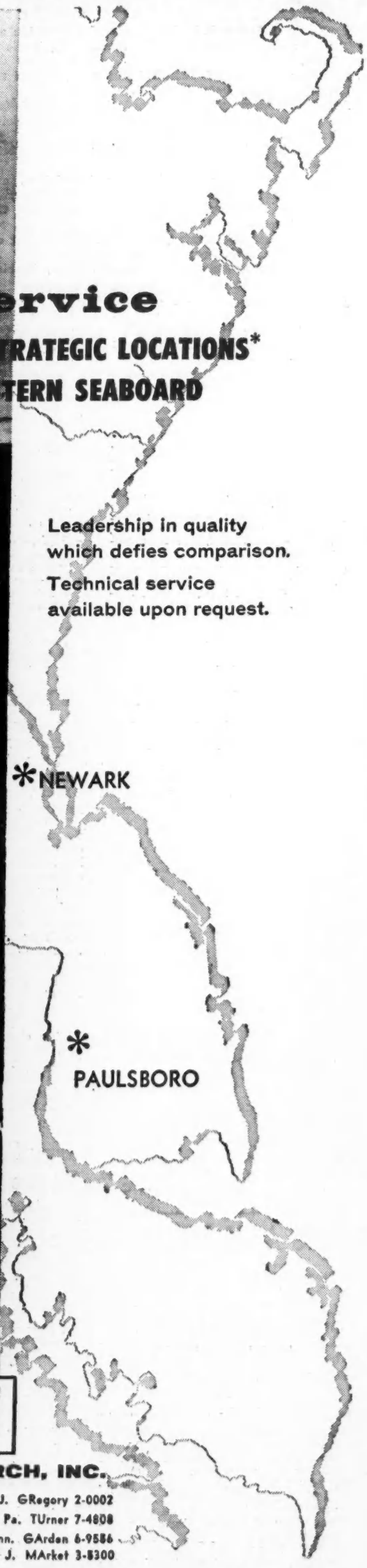

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, December 6 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns..... lb. 4.00 - 4.50
Abietic acid, coml., dms., c.l., works lb. .12 - —
dms., l.c.l., ex whse..... lb. .1490- —
Cryst., dms., c.l., works..... lb. .06½- —
dms., l.c.l., works..... lb. .07 - .07½
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works..... lb. .13½- —
tanks, works..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld.... lb. .30½- —
bbls., bgs., ton lots, frt. alld. lb. .31½- —
bbls., bgs., smaller lots, frt. alld lb. .34½- —
USP, bbls., 225-lb. dms. any quantity, lots. lb. .79 - —
100-lb. dms., any quantity. lb. .81 - —
Acetic acid, coml. or redist, 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. .....100 lbs. 8.25 - —
70%, bbls. .....100 lbs. 9.95 - —
80%, bbls. .....100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd....100 lbs.13.75 - —
dms., l.c.l., dlvd.....100 lbs.14.25 - —
tanks, dlvd. .....100 lbs.10.00 - —
USP, cbys., incl., dlvd. 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .17½- —
tanks, dlvd. E..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l. dlvd..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd.... lb. .11 - —
dms., l.c.l., dlvd..... lb. .12 - —
tanks, dlvd ..... lb. .08½- —
Acetonitrile, dms., c.l., works... lb. .45 - —
dms., l.c.l., works..... lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.22 - 1.24
Acetophenone, cns., dms. ..... lb. 1.40 - 1.60
Tech., dms., l.c.l., works..... lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse ..... lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (30-40 mesh) powd., (80 mesh). bbls., 1,000-lb. lots, same basis lb. .58½- —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms.. c.l., frt. alld. E. of Denver lb. .36 - —
non-ret dms.. l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
non-ret. dms. l.c.l., frt. alld. E. of Denver lb. .40 - —
tanks, frt. alld. E of Denver lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms.. frt. alld lb. .60 - —

Acids

Acid quotations, formerly grouped under one heading, are now listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
dms., l.c.l., works..... lb. .47½- —
tanks, works ..... lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., t.t.l., frt. equald... lb. .31 - —
tanks, frt. equald ..... lb. .27 - —
Adeps lanae (see Lanolin).

Abies Siberica Oil—Ammonium Acetate

Adipic acid, bgs., c.l., dlvd..... lb. .32¼- —
bgs., l.c.l., dlvd ..... lb. .35 - —
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 1.90 - 2.00
powd., 30 mesh., fib. dms lb. 2.50 - —
dl-Alanine, dms., works ..... lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. ..... lb. .65 - .85
Egg, edible, cryst., powd., bbls. lb. 1.52 - 1.54
flake ..... lb. 1.50 - 1.52
tech., cryst., bbls. ..... lb. 1.08 - 1.10

Alcohols

Alcohol quotations, formerly grouped under one heading, are now listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldol, 95%, dms., works ..... lb. .23 - —
Denaturing grade, dms. ..... gal 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .90 - —
fib. dms., l.c.l., dlvd. ..... lb. .95 - 1.05
Aletris root, bgs. ..... lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. N. of Tenn. and N.C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. 2.25 - —
Alkali blue toner, litho flushed, 125-lb. bbls., same basis. lb. 1.23 - —
Alkali blue dlvd. prices ½c. higher Ala., Fla. Ga., La. (Shreveport 1¼c.), Miss., N.C., S.C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City Wichita, frt. equald with Chicago.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb 6.50 - 6.55
2½% dms. frt alld. ..... lb .95 - 1.10

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l., dlvd.... lb. .32½- —
dms., l.c.l., dlvd. ..... lb. .33½- —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide, 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys. 55 to 990 lbs., works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. .. lb. .17½- —
dms., l.c.l., dlvd. ..... lb. 18½- —
tanks, dlvd ..... lb. 15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.25
NF, bots. ..... lb. 3.00 - 3.25
USP, sweet, cns., dms ..... lb. 1.25 - 1.40
Aloe, Cape, cs ..... lb 50 —
powd., cs ..... lb. 75 - —
Curacao, kgs. ..... lb 60 —
powd., kgs ..... lb. .80 - —
Aloin, USP, bbls., dms., kgs. lb 3.50 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs 4.30 - —
lump, dms., works ... 100 lbs 5.05 - —
powd., dms., works ... 100 lbs 5.20 - —
USP, burnt, dms ..... lb .20 - .21
hydrous, dms. ..... lb 07¾ - .08
Alum, potassium, gran., bgs., works. 100 lbs 4.55 - —
lump, dms., works ..... 100 lbs 5.30 - —
powd., dms., works ..... 100 lbs 5.45 - —
USP, burnt, dms ..... lb .20 - .21
hydrous, dms ..... lb .07¾ - .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0475- —
bgs., l.c.l., works ..... lb. .0350- .0775
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .15 - —
dms., l.c.l., works ..... lb. .15½- —
cryst., dms., c.l., works 100 lbs.16.00 - —
dms., l.c.l., works, 100 lbs.16.50 - —
soln. 32°, cbys., c.l., works lb .0445- —
cbys., l.c.l., works lb .0520- .1200
tanks, works 100 lbs 3.45 - —
NF, gran., dms., works lb. .29 - .30
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼- —
bgs., l.c.l., works ..... lb. .18¼- .20¼
Aluminum fluoride in fib. dms. 0.35c. per lb higher
Aluminum formate, basic soln., dms., c.l., works lb. .12 - —
dms., l.c.l., works ..... lb. .12½- —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0335- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0360- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0460- —
bulk, c.l., same basis ..... lb. .0310- —
Aluminum hydroxide, dried, USP XV, fib. dms. works lb. .82½- —
fib dms., contract, works lb. .79½- —
Gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
fib. dms., contract works.lb. 21 - —
9-9½% Al_2O_3, fib dms., works lb 19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2810- —
pigs, 10,000-lb. lots, frt. alld lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms ..... lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb. 1.11½- —
Standard grade, dms ..... lb. .81½- —
Aluminum paste and powder prices f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,993 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over.
Aluminum resinate, precip., 2.1% f.t.l., dms lb. .33 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Monobasic, ctns., c.l ..... lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Tribasic, ctns., c.l ..... lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs., c.l., works, frt. equald ton 41.00 - —
grd., bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
Iron-free, bgs., c.l., works, frt. equald 100 lbs 3.55 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 3.95 4.55
USP, gran., dms., works ..... lb. .29 .30
powd., dms., works ..... lb. .36 .37
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 - 7.50
p-Aminoacetanilide, frt. alld. lb 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb 1.74 - 1.77
USP dms. 1,000-lb lots or more, works lb. 2.60 - —
dms., smaller lots, works lb. 2.65 2.75
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd. ..... lb. .485 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt alld. ..... lb. .45 - —
tanks, frt. alld lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. 1.15 - —
Aminophylline, USP, 100-lb dms lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.70 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. ton.84.00 - —
refrigeration tanks works, frt. equald ton.86.50 - —
Aqueous, tanks, works, anhyd. basis ton.87.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 9.25 - —
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .41 - —

Ammonium benzoate, USP, fib. dms., ton lots, works lb. 1.00 - —
fib. dms., 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms. c.l., works ton.319.50 - —
dms., ton lots, ex whse ton.397.00 - —
dms., smaller lots, ex whse ton.402.00 - —
Ammonium bicarbonate, dom., dms. c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works 100 lbs 9.00 - —
Ammonium bichromate, dms., works. lb. 42 .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., bbls. lb. .45 - —
Powdered ammonium bromide 10c per lb. higher
Ammonium carbonate, USP, lump, dms., c.l lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 —
l.c.l., works 100 lbs. 7.75 8.20
USP, gran., fib. dms. lb. .17¼- —
Ammonium citrate, dibasic, bbls lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., dms.lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous)
Ammonium hypophosphate, NF, 5-lb. bots lb. 2.50 - —
Ammonium iodide, NF, dms., bots. lb. 4.26 - 4.38
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib. dms., 15,000 lbs., works lb. 1.22 - —
fib. dms., 2,000-lb. contracts, works lb. 1.23 - —
single fib. dm., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., western works, frt. equald, base price ton.64.00 - —
USP, gran., bbls., dms. lb. .17¼- —
Ammonium nitrate, imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton base price ton.68.00 - —
August discount ton 5.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va. ton.49.75 - —
Ammonium oxalate, fine gran., dms. lb. .28½- .30½
Ammonium pentaborate, gran., bgs., c.l., works ton.187.50 - —
bgs., ton lots, ex whse ton.273.50 - —
bgs., smaller lots, ex whse ton.278.50 - —
Ammonium pentaborate powder $10 per ton higher.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate, dibasic, NF, V bbls., dms. lb. .48 - —
Tech, bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- —
Ammonium sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 - —
purif., dms., works lb. .10 - .10½
Syn., bulk, c.l., works ton.34.00 - —
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
Ammonium thioglycollate, comi., cbys., 100% basis lb. 1.35 - 1.65
Highly purif., cbys., 100% basis. lb. 1.70 - 1.96
d-Amphetamine hydrochloride, dibasic bots. lb.18.00 -28.00
dl-Amphetamine hydrochloride, dibasic, bots lb. 4.50 - 6.00
d-Amphetamine hydrochloride, monobasic., bots lb.18.00 -28.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.14.50 - —
dl-Amphetamine phosphate bots lb. 4.50 - 6.00
d-Amphetamine sulfate, fib. dms., 100-lbs. lots lb.16.50 - —
dl-Amphetamine sulfate, fib. dms., lb. 4.50 - 6.00

Amyl acetate, ex fusel oil, tech., dist. from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .19½- .20
tanks, same basis lb. .16 - .16½
Ex pentane, reg. dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20 - —
tanks, dlvd lb. .16½- —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .20¼- —
dms., l.c.l., dlvd lb. .21¼- —
tanks, dlvd. lb. .17¾- —
Tech., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½- —
Amyl alcohol, ex fusel oil (see Fusel oil, refd.).
Amyl alcohol, ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45 - —
Ex-pentane, mixed amyls, dms., c.l., frt. alld lb. .18½- —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms. c.l., frt. alld. lb. .19¾- —
dms., l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .18½- —
dms., l.c.l., frt. alld E lb. .19½- —
tanks, frt. alld. E lb. .16 - —
Amyl alcohol, l-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-Pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl cinnamic aldehyde, dms. lb. 1.75 - 2.20
Amyl salicylate, cns. dms lb. .82 - 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
dms., l.c.l., works lb. .50½- —
tanks, works lb. .47 - —
p-tert-Amyl phenol, dms., c.l. works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyris oil, dms lb. 1.30 - 1.40
Anethol, cns., dms lb. 1.35 - —
Tech., dms. lb. 1.00 - 1.25
Angelica root, dom., bls. lb. .60 - .65
Angelica root oil, bots. lb.120.00 -130.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .22 - —
dms., l.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .20 - —
tankwagons, min 2,000 gals lb. .20½- —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 2.10 - 2.75
Anise seed, Mexican, bgs. lb. .16 - .16½
Spanish, bgs. lb. .16½- .17½
Syrian, bgs. lb. .16 - .16½
Anisic aldehyde, bots, dms. lb. 1.85 - 2.15
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, Dominican/Ecuador, whole, bgs. lb. .19½- .20
Indian, bgs. lb. .16 - —
Anthracene, 90-95%, bbls., ton-lots, works lb. .83 - —
bbls., smaller lots, works lb. .95 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines lb. .33 - —
cs., c.l., mines lb. .33½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt. alld. lb. .26 - —
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots., dlvd lb. .23 - —
smaller lots, dlvd. lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms. lb. .69½- .74½
USP, powd., dms. lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls. lb. 3.50 - —
Apomorphine hydrochloride, USP 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms. lb. .90 - 1.25
Arabic gum, amber, sorts, bgs. lb. .21 - .23
USP, powd., bbls. lb. .27 - .29
Areca nuts powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 - —
Arnica flowers (true Montana), bls. lb. 1.40 - 1.50
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms. lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07¼
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Maroon shade, bbls. lb. 3.70 - —
Asafetida gum, cns. lb. .40 - —
Powd., bbls., dms. lb. .85 - —
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude,
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.44.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 25-100 kilo lots kilo.10.00 - —
dms., 10-kilo lots kilo.10.35 - —
dms., 5-kilo lots kilo.10.75 - —
bots., 1-kilo lots kilo.12.00 - —
bots., 500-gram bots kilo.12.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
ex-whse, N. Y., N. J. ton.83.56 -86.50
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton.35.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295° F. fusing pt., bgs. c.l., mines ton.40.00 - —

true as a plumb...

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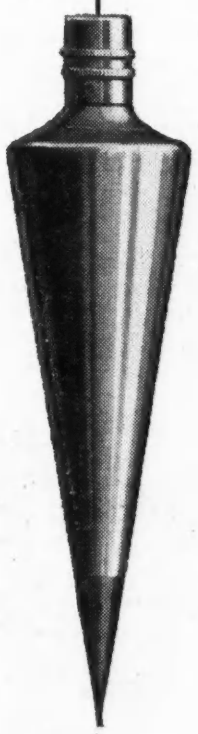

For uniform Quality

For steady Supply

For prompt Delivery

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Ethyl Acetate
Butyl Alcohol
Butyl Acetate
Acetone
Acetaldehyde
Acetic Acid

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NEW YORK • NEW ENGLAND • MIDWESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
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Peerless Oil & Chemical Corp. ships solvents and fuels in *Tri-Sure*® equipped drums

AN EXTENSIVE line of solvents, chemicals and diesel fuels are blended, drummed and shipped by the Peerless Oil & Chemical Corp., Long Island City, N. Y.

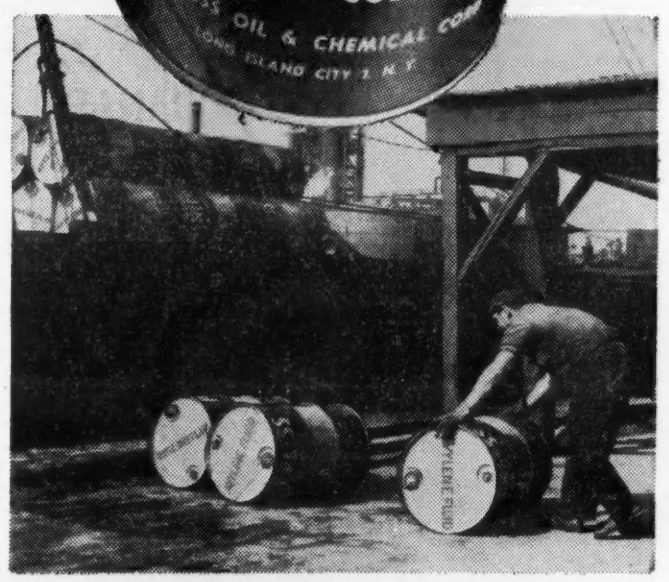
These include low-pour-point fuels which are shipped to the Arctic for use in the operation of radar nets, and to the Antarctic for International Geophysical Installations—regions where fuel must function efficiently in temperatures as low as minus 74°—and critical-test, power-boosting chemicals for use in aircraft engines.

To prepare and protect drum-shipped products for any exigency, Peerless adheres to rigid specifications, enforces strict quality control—and equips its drums with *Tri-Sure* Closures.*

Peerless, and other leading shippers the world over, have learned that when conditions impose severe demands on drum-shipped products, there is only one choice in closures—*Tri-Sure.* For under *all* conditions, in *all* climates, the interengaging Tri-Sure *Flange*, *Plug* and *Seal* give unfailing protection from leakage, seepage and losses.

Your next shipment—of any product, to any destination—will be *secure* in Tri-Sure equipped drums. Play safe *now* and specify "Tri-Sure Closures" to your supplier.

**The "Tri-Sure" Trademark is a mark of reliability backed by over 35 years serving industry. It tells your customers that genuine Tri-Sure Flanges (inserted with genuine Tri-Sure dies), Plugs and Seals have been used.*



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CLOSURES

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
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B. Van Leer N. V., Stadhouderskade 6, Amsterdam, Holland
Van Leer Industries, Ltd., Seymour House, 17 Waterloo Place, Pall Mall S. W. I, London, England

Asphalt—Bloodroot

Asphalt, manjak, No. 10, crude, dms., works lb. .06¼ - —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 - —
emulsion tanks tankwagon refy gal. .09½ - —
steam-reid., 50-80 penetration, tanks, tankwagon, refy ton. 21.00 - —
85-300 penetration, tanks, tankwagon refy ton. 20.00 - —
Aspirin (see Acetylsalicylic Acid)
Atropine, NF tins ..... oz. 4.00 4.50
Atropine sulfate, USP, bots. .... oz. 2.35 - 2.45
Avacado oil, cns. ..... lb. 3.00 Nom.

B

Bacitracin bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units, 50,000 units .70 —
Balm of Gilead buds, dried, bgs. lb. 1.25 - 1.35
Barberry root bark bgs lb. .28 - .30
Barbital, NF 100-lb dms lb 4.50 - —
Barbital sodium, NF dms lb 4.75 - —
Barium carbonate precip., bgs. c.l., works ton. 106.50 - —
bgs. smaller lots works ton. 121.50 - —
Barium chlorate, dms. works lb. 32 - .41
Barium chloride, anhyd., bgs., c.l., works ton. 176.00 - —
bgs., l.c.l., works ton. 191.00 - —
Barium chloride, NF, cryst., 100-lb. dms lb. .22 - —
Tech., cryst., bgs. c.l., works, 100 lbs. 7.00 - —
bgs. l.c.l. works 100 lbs. 7.75 - —
Barium chromate bgs. frt. equald. lb. .35 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l. t.l. frt equald ton. 208.00 - —
bgs. l.c.l. t.l. frt. equald ton. 218.00 - —
Barium monoxide (see Barium oxide).
Barium nitrate bbls. c.l. t.l. dlvd. lb. .16 - —
bbls. l.c.l. t.l.l. dlvd lb .17 - —
Barium oxide grd., dms., c.l. t.l. frt. equald ton. 275.00 - —
dms. l.c.l. t.l.l. frt equald ton. 285.00 - —
Barium peroxide dms. frt. equald. lb .20 - —
Barium stearate ctns. c.l. frt. alld. lb. .41 - —
ctns. l.c.l. same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe)
Barium sulfate X-ray dms lb .15 - .15½
Barium sulfide dms. c.l. works ton. 95.00 - —
dms., l.c.l. works ton. 105.00 - —
Barytes, southern off-color, bgs. mines ton. 25.00 - —
95-75% bgs. mines ton. 25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton. 55.00 - —
paper bgs., ex whse, New York ton. 79.85 - —
Battery acid, cbys. c.l. works, E. 100 lbs. 2.35 —
cbys., l.c.l., works, E . . 100 lbs. 2.65 3.45
Bauxite, bulk, mines ..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns. lb. 2.10 - 3.00
Puerto Rican, 55-60%, cns .... lb. 2.50 - 3.00
West Indian, 50-55%, cns., dms., lb. 1.95 - 2.40
Bayberry wax, bgs ..... lb. 45 - .47
Beeswax, crude, African, bgs .... lb. .64 - .66
Brazilian, bgs, ... lb. .67 Nom.
Central American bgs ..... lb. .65 - .67
Chilean, bgs. ..... lb. .67 Nom.
Beeswax, refd., USP, bleached, white, bricks, 100-lb. ctns. lb. .77 - .80
white, slabs, 100-lb. ctns .... lb. .76 - .79
yellow, bricks, 100-lb. ctns .... lb. .69 - .71
yellow, slabs, 100-lb. ctns .... lb. .68 - .70
Belladonna leaf, bls ..... lb. .32 - —
Belladonna root, bls ..... lb. .30 - —
Bentonite dom. 200 mesh, bgs. c.l., mines ton. 14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton. 84.00 - —
bgs., 1-ton lots, ex whse. ton. 87.00 - —
low gel. bgs. 5-ton lots, ex whse ton. 82.35 - —
bgs. 1-ton lots ex whse. ton. 85.35 - —
Benzal chloride, cbys. works ... lb. .44 - —
Benzaldehyde, NF, dms. ..... lb. .80 - .86
Tech., cbys. dms., t.l ..... lb. .43 - —
cbys. smaller lots ..... lb. .44 - —
Benzene coaltar pure or nitration, tanks, works:—
Bethlehem, Pa ..... gal. .36 - —
Birmingham district ..... gal. .36 - —
Chicago district ..... gal. .36 - —
Cleveland district ..... gal. .36 - —
Geneva, Utah ..... gal. .36 - —
Johnstown, Pa ..... gal. .36 - —
Lackawanna, N. Y ..... gal. .36 - —
Lone Star, Tex ..... gal. .36 - —
Lorain, Ohio ..... gal. .36 - —
Middletown, Ohio ..... gal. .36 - —
Minnequa, Colo ..... gal. .36 - —
Benzene, coaltar, pure or nitration, tanks, works:—
Philadelphia district .... gal. .36 - —
Pittsburgh district ..... gal. .36 - —
Sparrows Point, Md .... gal. .36 - —
Syracuse, N. Y ..... gal. .36 - —
Terre Haute Ind ..... gal. .36 - —
Youngstown, Ohio ..... gal. .36 - —
Benzene, petroleum Houston, Tex., tanks gal. .36 .36
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech. high gamma, dms., c.l., dlvd. gamma unit-lb. .0075- .008
dms. l.c.l., works gamma unit-lb. .009 .0095
low gamma, dms., c.l., dlvd. gamma unit-lb. .0075- —
dms., l.c.l., works. gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow AAA bbls. dlvd. lb. 2.20 - —
AAOT, bbls., dlvd ..... lb 2.45 - —
Lightfast, bbls., dlvd ..... lb 3.25 - —
Benzocaine dms ..... lb 3.48 3.50
Benzoic acid, tech., c.l., t.l., frt. alld. lb .37 - —
ton lots, same basis ..... lb. .41 - —
1,000-lb. lots, same basis .... lb. .43 - —
USP, ton lots ..... lb. .48 - —
1,000-lb. lots ..... lb. .50 - —
Benzoin gum Sumatra cs ..... lb .33 —

Benzol

Benzol quotations, both coaltar and petroleum, may now be found under Benzene.

Benzophenone, dms ..... lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tank trucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib dms., 50 to 1,000-lb. lots, works lb. .98 1.08
Benzyl acetate, f.f.c., cns., dms lb. .65 - .79
Benzyl alcohol, NF, dms ..... lb. .65 - .80
Tech., dms., dlvd. lb. .47½ - .49
Benzyl benzoate, NF, f.f.c., 500-lb. dms lb. .75 - 1.13
Benzyl chloride, tech., cbys., dms., c.l. works, frt. equald lb. .22½ - .25½
cbys., dms. l.c.l. same basis lb. .23½ - .25½
tank trucks, dlvd. Metropolitan area lb. .21 —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns ..... lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate, cns ..... lb. 1.85 - 2.10
Benzyl isoeugenol, cns. ..... lb. 9.85 - —
Benzyl propionate, bots. ..... lb 1.35 - 1.65
Benzyl salicylate, bots. ..... lb. 1.60 - 1.85
Benzylidine acetone, bots ..... lb. 1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).
Berberine bisulfate, cns. ..... lb. 35.00 -36.25
Berberine hydrochloride, bots. .... lb. 35.00 -36.25
Bergamot oil, nat. NF, Italian cns. lb. .12.50 -13.25
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 - —
Betaine hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 - —
Betaine monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 - —
Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots ..... gram. 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns ..... lb. 1.50 - 1.90
Rectified, cns ..... lb. 1.75 - 1.85
Bismuth chloride, jars ..... lb. 5.11 - —
Bismuth hydroxide dms ..... lb. 4.65 - —
Bismuth metal, bxs., ton lots .... lb. 2.25 - —
Bismuth nitrate, cryst., dms .... lb. 2.10 - 2.17
Bismuth oxide, anhyd., dms ..... lb. 4.47 - 5.05
Bismuth oxychloride, dms. ..... lb. 4.37 - 4.42
Bismuth subcarbonate, USP, dms lb 3.20 - —
Bismuth subgallate, NF, fib. dms lb. 3.15 - —
Bismuth subiodide, fib. dms ..... lb. 5.37 - —
Bismuth subnitrate, NF, dms .... lb. 2.65 - —
Bismuth subsalicylate, USP, dms. lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., frt. alld. lb. .30 - —
bgs., l.c.l., same basis ..... lb. .31 - —
Blackberry root bark, bls ..... lb. .50 - .55
Black haw root bark, bls ..... lb. .63 - .65
Black haw tree bark, bls ..... lb. .45 - .50

Black Pigments

Black pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton. 115.00 - —
bgs., l.c.l., works ton. 125.00 - —
bgs., l.c.l., New York whse ton. 165.00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 5.00 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 5.75 - —
Blood, dried, soluble, bgs., c.l. lb. .13 - .14
bgs., t.l. ..... lb. .15 - .17
bgs., l.t.l. ..... lb. .15½ - .35⅛
Bloodroot, bls. ..... lb. .48 - .50

Now available commercially . . .

BENZOGUANAMINE

solid . . . reactive . . . aromatic diamine . . .

non-volatile . . . relatively non-toxic

and non-irritating

TENNESSEE announces benzoguanamine . . . a member of the triazine family with characteristics that offer outstanding benefits in product improvement and lower costs.

Comparison to melamine: A substituted melamine with two reactive amino groups plus a non-reactive phenyl group per molecule, as shown in structure above. (Melamine has three reactive amino groups.) Reacts with formaldehyde and alcohols to form a wide variety of triazine resins. Can be processed with the same equipment and techniques as used for melamine. Compared to melamine, resins based on benzoguanamine have improved compatability, water resistance, color retention, initial gloss, and alkali resistance.

Applications: Formulation of resins for industrial coatings, molding compounds, adhesives, paper products, and textile finishes. As a chemical intermediate, benzoguanamine contains two reactive amino groups attached to a stable triazine ring.

Physical properties: Molecular weight 187.2 . . . Freezing point 227°C . . . Full details in Technical Data Bulletin; free on request.

Available in commercial quantities. Experimental samples will be forwarded when requested on company letterhead.

TENNESSEE PRODUCTS & CHEMICAL Corporation
NASHVILLE, TENNESSEE

A DIVISION OF THE CHEMICAL, PAINT AND METALLURGICAL DEPARTMENT OF MERRITT-CHAPMAN AND SCOTT CORPORATION

Blue Pigments

Blue pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms. lb. 3.40 - 3.85
Peruvian, dms. lb. 2.75 - 3.50
BON acid maroons pure, bbls lb 4.75 - —
Resinated, bbls lb. 1.50 - —
Bone black, dms. t.c.l. frt. alld lb. .17 - .23¼
Pacific coast bone black prices 2c. per lb. higher
Bonemeal, steamed, works, E ton.62.50 - —
Bone oil, dms. works lb. .65 .70
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate, tribasic)
Borax, tech. anhyd. 99%, bgs., c.l., works ton.83.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.137.25 - —
Borax, tech., anhyd., 99½%, bgs., smaller lots, same basis ton.142.25 - —
bulk, c.l., works ton.74.00 - —
Tech., cryst., 99½% bgs., c.l. works ton.81.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.137.25 - —
bgs., smaller lots, same basis ton.142.25 - —
gran. decahydrate, 99½%, bgs., c.l. works ton.45.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.99.25 - —
bgs., smaller lots, same basis ton.104.25 - —
bulk, c.l., works ton.38.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.60.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.114.25 - —
bgs., smaller lots, same basis ton.119.25 - —
bulk, c.l. works ton.53.50 - —
powd., 99½%, bgs., c.l., works, ton.50.00 - —
bgs., ton lots ex whse. New York or Chicago ton.104.25 - —
smaller lots same basis ton.109.25 - —
USP borax $15 per ton higher
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt lb. .18 - .24
bgs., t.c.l., same basis lb. .19 - .26
Boric acid, tech. 99.9% cryst., bgs., c.l. works ton.129.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.184.25 - —
bgs. smaller lots same basis. ton.189.25 - —
dms., c.l. works ton.153.50 -173.50
dms., ton lots, ex whse. New York or Chicago ton.208.75 -228.75
dms. smaller lots same basis. ton.213.75 -233.75
99.9% gran. bgs. c.l. works ton.104.00 —
bgs., ton lots, ex whse. New York or Chicago ton.159.25 - —
bgs. smaller lots same basis. ton.164.25 - —
dms. c.l. works ton.128.50 -148.50
dms., ton lots, ex whse. New York or Chicago ton.183.75 -203.75
dms., smaller lots same basis. ton.188.75 -208.75
bulk, c.l. works ton.98.00 - —
99.9%, powd. bgs., c.l., works. ton.109.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.159.25 - —
bgs., smaller lots same basis. ton.164.25 - —
dms., c.l. works ton.133.50 -153.50
dms., ton lots, ex whse., New York or Chicago ton.188.75 -208.75
dms., smaller lots same basis. ton.193.75 -213.75
USP boric acid $25 per ton higher.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride gas, cyls, truckload, works lb. .62 - —
cyls., t.t.l., works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.76 - —
Bromine, purif. cs. c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., t.c.l., same basis lb. .34 - .39
ret. dms. c.l., t.l. dlvd. E. of Rockies lb. .31 - —
ret. dms., t.c.l., same basis lb. .31 - .34
tanks, same basis lb. .22½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., t.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb cbys lb 1.80 - 1.90
Bromstyrol, bots lb. 5.45 - 5.70
Brucine, cns., 100-oz. lots oz. .20 Nom.
Brucine sulfate, NF, cns., 100-oz. lots oz. .20 Nom.
Buchu leaves, bls lb. 1.20 - —

Brown Pigments

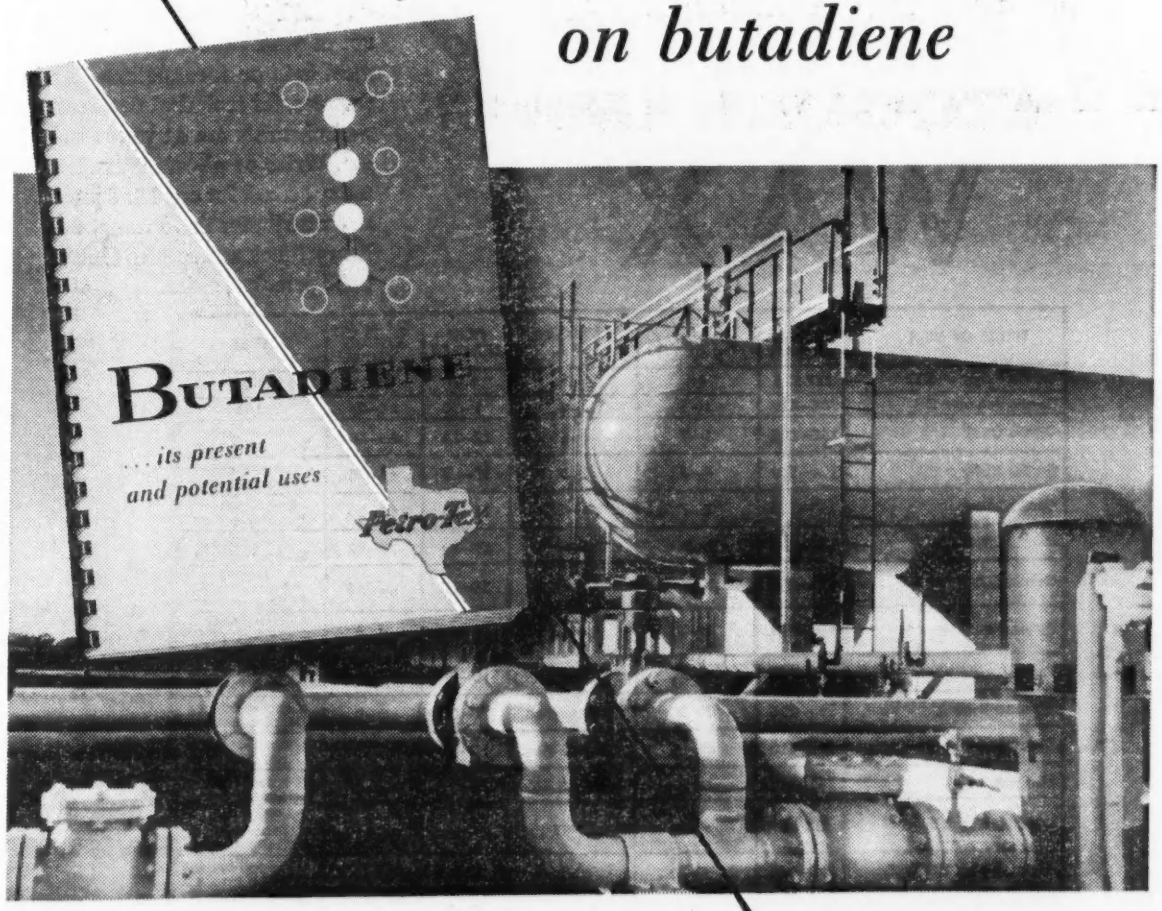
Brown pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd., cyls., c.l., refy lb. .21 - —
cyls., t.c.l., refy lb. .22 - —
tanks, contract, refy. lb. .14¾ - .15
Butane, indust., tanks, group 3 gal. .04 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., t.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., t.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ - —
dms., t.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17 - —
dms., t.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .14½ - —
Syn., dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
sec-Synthetic, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd. lb. .16 - —
tanks, dlvd. lb. .12½ - —
tert-Synthetic, dms., c.l., frt alld. dlvd. E lb. .14¾ - —
dms., t.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms. c.l., works lb. .37½ - —
dms., t.c.l. works lb. .38¼ - —
n-Butyl ether dms., c.l., works lb. .35¼ - —
dms., t.c.l., works lb. .36 - —
tanks, works lb .33¼ - —
Butyl lactate, dms. c.l., frt alld E. of Rockies lb. .42½ - —
dms., t.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms. works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., t.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., t.c.l., works lb. .32 - —
Butyl phenylacetate, dms lb. 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .25¾ .26
dms., t.c.l., same basis lb. .26¾ - —
Butylamine (see Mono-, Di- and Tri-butylamine).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works, lb. .27½ - —
bgs., t.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., t.c.l., dlvd. lb. .23 - —
tanks, dlvd lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., t.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld E of Rockies lb 6.30 - —
Light shade, bbls. same basis lb 5.90 - —
Medium shade, bbls. same basis. lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.35 - —
Cadmium CP yellow, all shades, bbls., frt. alld E of Rockies. lb 2.85 - —
Cadmium iodide, 25-lb. fib. dms lb 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd lb. 1.70 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.70 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 2.00 - —
Light shade, bbls., same basis lb. 1.73 - —
Medium shade, bbls. same basis lb. 1.90 - —
Medium light shade bbls. same basis lb. 1.82 - —
Maroon shade, bbls. same basis lb. 2.09 - —
Cadmium-selenide lithopone orange deep shade, bbls., frt. alld E. of Rockies lb 2.00 - —
Light shade, bbls same basis lb. 1.60 - —
Cadmium-selenide lithopone red, dark shade, bbls., frt. alld. E. of Rockies lb. 2.61 - 2.66
Light shade, bbls., same basis lb. 1.89 - 1.94
Maroon shade, bbls., same basis lb. 2.82 - 2.84
Dark maroon shade, bbls., same basis lb. 2.87 - 2.88
Medium shade, bbls., same basis. lb. 2.26 - 2.31
Medium-light shade, bbls., same basis lb. 2.02 - 2.07
Orange-red shade, bbls., same basis lb. 1.77 - —
Orange shade, bbls., same basis. lb. 1.57 —
Cadmium-selenide lithopone yellow, all shades, bbls., frt alld. E. of Rockies lb 1.15 - —
Caffeine, NF, citrated, dms., 100-lb lots or more lb 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.50 - —
cryst., hydrous, dms 100-lb lots or more lb. 2.33 - —

Just off the press ***first technical manual on butadiene***



Within the 48 pages of this first comprehensive technical manual on Butadiene is a wealth of fundamental data, much of which has been hitherto locked up in laboratory notebooks. Included are:

Physical properties and polymerization data.

Chemical properties and detailed information on all principal reactions.

Butadiene derivatives graphically presented in a series of six "trees" covering:

Diels-Alder reactions
Halogen reactions
Halogen compound reactions
Nitrogen compound reactions
Polymerization reactions
Sulphur compound reactions

Specifications and analytical procedures.

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cryst., hydrous, dms., 100-lb lots or more lb. 2.33 - —
Cajeput oil, native, cns. ..... lb 1.75 - 3.30
Redist, USP., cns. ..... lb. 1.90 - 2.10
Calamine USP. dms. ..... lb .34 —
Calamus oil, bots. ..... lb.12.00 -20.00
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
Vials, 25 to 100 gram lots, works gram. .65 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, 6lb. dms., 100 lbs. or more frt adjusted lb 4.00 - —
Calcium arsenate dealers, bgs., c.l., frt. alld lb. .09 - .09½
bgs. l.c.l. same basis ..... lb. .10 - .10½
Calcium bromide NF. 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton.149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Calcium carbonate, precip., dense, bgs., c.l., works ton.32.50 - —
bgs., l.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 - —
Calcium carbonate, precip., surface treated bgs., c.l., works. ton.37.50 - —
bgs., l.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 -160.00
bgs., l.c.l., works ton.120.00 -175.00
Calcium chloride, flake, 77-80%, paper bgs. c.l., works frt equald ton.31.00 - —
Flake, conc., 94-97%, paper bgs., c.l., works, frt., equald ton.37.80 - —
Gran., purit., dms lb .27 - —
Liquor, 40%, tanks, frt. equald. ton.12.50 - —
Pellets, bgs., c.l., works .... ton.37.80 - —
Powd., bgs., c.l., works ..... ton.37.00 - —
Solid, 73-75%, dms. c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
USP, gran., dms ..... lb. .32 - —
Calcium chromate, bgs., frt. equald. lb. .29½- .30
Calcium cyanide, dms., c.l., dlvd E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb .24 - .55
Calcium cyclamate, 100-lb. dms lb 2.95 - —
Calcium gluconate, AA, dms.... lb. .76 - —
USP, dms. ..... lb. .67 - .69
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb. cs., dlvd E. of Rockies cs.22.95 -25.10
100-lb. dms., same basis .. dm.30.80 -34.50
Calcium hypophosphite, dms., 1,000-lb. lots .. lb 1.28 - —
Calcium iodide, jars ... lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
smaller lots, works ..... lb. .41 - .48
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .27¼- —
Calcium pantothenate, dms., bots., frt. adjusted gram. .045 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate dms lb. .74 - —
Calcium phosphate, dibasic, USP, bgs.. c.l. frt equald 100 lbs. 8.00 - —
bgs., l.c.l., frt. equald.100 lbs. 8.75 - —
Feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 -83.25
bgs., l.c.l., frt. equald ton.89.55 -93.25
19% P c.l., works, Tex. Cit ton 76.00 —
21% P. bgs., c.l., t.l., frt. equald. ton.90.30 - —
bgs., l.c.l., frt. equald ...ton.100.30 - —
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs 7.20 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - —
Tribasic, NF, precip., bgs., c.l., works, frt equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald..100 lbs.10.00 - —
Calcium phytate, bgs., works lb. .50 - —
Calcium resinate, precip., dms., ton lots, frt. alld., works .. lb. .33 - —
Calcium silicate, hydrated, bgs. c.l., works lb. .06 - —
bgs., l.c.l., works ..... lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - 44
Calcium sulfate (see Gypsum).
Calomel, NF X, powd., dms ..... lb. 5.42 - —
Camphene 46° m.p., dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
Camphene, chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.68 - 3.70
Nat., USP, powd., cs., 100-lb lots. lb. .60 - .65
tablets, 1-oz., ½-oz cs lb. .85 - .90
Syn., tech., 1 bbl or more lb. .48 —
Syn., USP, gran., powd., bbls., 2,000-lb lots lb. .59 - —
bbls., 1,000-lb lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots lb. .85 - —
ctns. 500-lb lots lb. .86 - —
ctns. smaller lots lb. .87 - —
Camphor oil, sassafrassy, dms... lb. .26 - .35
White, dms ..... lb. .29 - —
Cananga oil, native, cns ..... lb. 7.60 - 7.85
Rectified cns ..... lb. 9.55 -12.65
Candelilla wax, crude, bgs..... lb. .52 - .54
Refd., bgs. ..... lb. .58 - .62
Powdered Candelilla wax, 20 to 100 mesh, 8c. higher.
Cantharides Chinese, cs..... lb 2.00 2.05
powd., bxs ..... lb. 2.25 - 2.30
Russian, bgs ..... lb. 3.50 —
powd., bxs ..... lb. 4.10 - 4.15
Capric acid, C. P., dms. ..... lb. .27 - .29
tanks ..... lb. .25 —
Caprvl alcohol, 85% dms., c.l., and t.l., works lb. .19 —
dms. t.t.l. same basis ..... lb. .19½- —
tanks, frt. equald ..... lb. .16½- —
Sec., 92-99%, dms., c.l. ..... lb. .22 —
dms., l.c.l. ..... lb. .23 —
tanks ..... lb. .19½- —
Caprylic acid, dms. ..... lb. .27 - .29
tanks ..... lb. .25 —
Capsicum (see Pepper, red).
Capsicum oil (see Capsicum oleoresin)
Capsicum oleoresin, NF from dom. pepper, dms lb. 4.75 - 5.25
NF, from African pepper dms lb. 4.50 - 5.00
Caraway seed, Dutch, bgs..... lb. .10 - .10½
Caraway oil, NF, cns..... lb. 3.00 - —
Carbazole, 97% bbls, ton lots, works lb. 1.05 —
Carbon black channel rubber beads, bulk, c.l., works. lb. .07¼- —
bgs., c.l., works ..... lb. .07¾- —
bgs., l.c.l., works ..... lb. .14½- —
Furnace fast extruding bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. ..... lb. .12½- —
high abrasion bulk c.l. works. lb. .07¼- —
bgs., c.l., works ..... lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .13½- —
high modulus bgs. c.l. works. lb. .06¼- —
ctns., l.c.l., whse. ..... lb. .12 - —
semi-reinforcing bgs. c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse. ... lb. .11½- —
Pigment high color beads, ctns., c.l., works lb. .72 - —
ctns. l.c.l., dlvd or whse. lb. .78 - —
medium color uncompressed, bgs. c.l., works lb. .12 - —
bgs. l.c.l. dlvd or whse lb. .19 - —
Carbon dioxide indust., wholesale, bulk dlvd Metropolitan area ton.73.00 -115.00
cyls., works lb. .08 - .09
Solid, wholesale works lb. .035 .040
Carbon disulfide 55-gal. dms., c.l., works frt equald to competitive points lb. .07 —
55-gal. dms. l.c.l. same basis lb. .08½- .09
5-gal. dms. 30 dms to c.l., same basis lb. .13 —
5-gal. dms. less than 30 dms., same basis lb. .16 - —
tanks dlvd lb. .0545- —
Carbon tetrachloride, CP, consumers dms., c.l. frt. alld lb. .12¾- —
l.c.l. frt. alld lb. .15¼- —
Tech. consumers dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l. t.l. frt. alld lb. .14¼- —
tanks frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms. 100-lb lots, works lb. 4.00 4.25
dms. smaller lots, works lb 4.10 4.75
Cardamom oil, NF bots. ..... lb.45.00 -48.00
Cardamom seed, bleached, "A". lb. 3.15 - —
Bleached, "B" ..... lb. 3.05 - —
Decorticated, Ceylon cs..... lb 3.00 - —
Guatemalan, cs ..... lb. 2.95 - —
Green, Alleppey, bgs..... lb. 2.30 - —
Ceylon, bgs. ..... lb. 2.30 - —
Carmine No. 40, NF bulk, 100-lb lots or more dlvd lb.16.80 - —
bulk, smaller lots dlvd lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .68 - .69
North country No. 2, crude, bgs., ton lots lb. .78 - .80
refd., pure, ton lots lb. .92 - .94
North country No. 3, Ceara, crude, bgs., ton lots ..... lb. .70 - .72
Ceara refd. pure bgs., ton lots. lb. .80 - .82
Parnahyba, crude bgs. ton lots. lb. .71 - .73
Parnahyba, refd. pure, bgs., ton lots lb. .80 - .82
Carnauba wax, yellow, No. 1, Ceara, bgs., ton lots. lb. 1.36 - 1.38
Parnahyba, bgs., ton lots ..... lb. 1.38 - 1.40
Powdered carnauba wax, 20 to 100 mesh, 8c. higher.
Carotene, tech, 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .295 - —
Carotene, tech., in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400-000 A units per gram., dms. dlvd million units .21 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram, cns kilo.69.60 - —
Liquid in vegetable oil, 500,000 A units per gram, cns kilo.87.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns. gram. .29 - —
Carvol, bots. ..... lb. 5.80 - 6.00
Cascara sagrada bark, bulk lb. .35 - .36
Casein, dom. edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
Dom., edible acid precip. 80 mesh bgs., 10,000-lb. lots or more works lb. .64 - —
Imp., acid-precip., grd. Argentine, bgs., c.l. lb. .21½- —
New Zealand ..... lb. .24 - .24½

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Cardis Polymer #10	212-216	0-1	1-1½	8-10	25-30	Polymer
Cardis Polymer #8	205—210	1—2	3—5	7—10	24—28	Polymer
Cardis One†	195—200	1—2	4—5	12—16	55—65	Emulsifiable Petroleum Wax
Cardis 314®	184—189	4—6	4—5	13—16	45—55	Emulsifiable Petroleum Wax
Cardis 319®	180—185	5—7	4—6	18—20	65—70	Emulsifiable Petroleum Wax
Cardis 320®	180—185	5—7	4—5	28—30	75—80	Emulsifiable Petroleum Wax
Cardis 262®	195—200	3—5	Brown	14—17	40—45	Specially Processed Petroleum Wax
Polymekon*	195 MIN.	0—3	Yellow	0—0	0—0	Specially Processed Petroleum Wax
Fortex®	190—200	3—5	2½—3½	0—0	0—0	Microcrystalline Hard & Plastic
Mekon® B-20	190—195	3—5	Brown-Black	0—0	0—0	Microcrystalline Hard & Brittle
Mekon® A-20	190—195	3—5	Amber-6 Max.	0—0	0—0	Microcrystalline Hard & Brittle
Mekon® Y-20	190—195	3—5	Yellow-3-3½	0—0	0—0	Microcrystalline Hard & Brittle
Warco® Wax #5	158-160	9-10	Ivory	—	—	Specially Processed Petroleum Wax
Warco® Wax 180 White	180—185	4—7	White	0—0	0—0	Microcrystalline Hard & Brittle
Warco® Wax 180 Brown	180—185	4—7	Brown	0—0	0—0	Microcrystalline Hard & Brittle
Warco® Wax 170-A Yellow	170—175	10—15	Yellow 1-2	0—0	0—0	Microcrystalline Plastic
Warco® Wax 170-A Brown	170—175	10—15	Brown	0—0	0—0	Microcrystalline Plastic
Warco® Wax 150-A Yellow	145—155	15—20	Yellow 1-2	0—0	0—0	Microcrystalline Plastic
Warco® Wax 150-A Brown	145—155	15—20	Brown	0—0	0—0	Microcrystalline Plastic
Warcosine®	150—155	15—20	White	0—0	0—0	Microcrystalline Plastic
Paraffin	136—138	FULLY REFINED				Crystalline
Cane Wax 500	171—176	3 Max.	Light Brown	25—35	55—70	Vegetable Wax
Cane Wax 517-711	171—173	2 Max.	Black	—	—	Vegetable Wax
Cane Wax 700	169—174	1.0—1.5	Light Brown	25—30	70—90	Vegetable Wax

† Pat. No. 2,471,102
* Patent Applied For.

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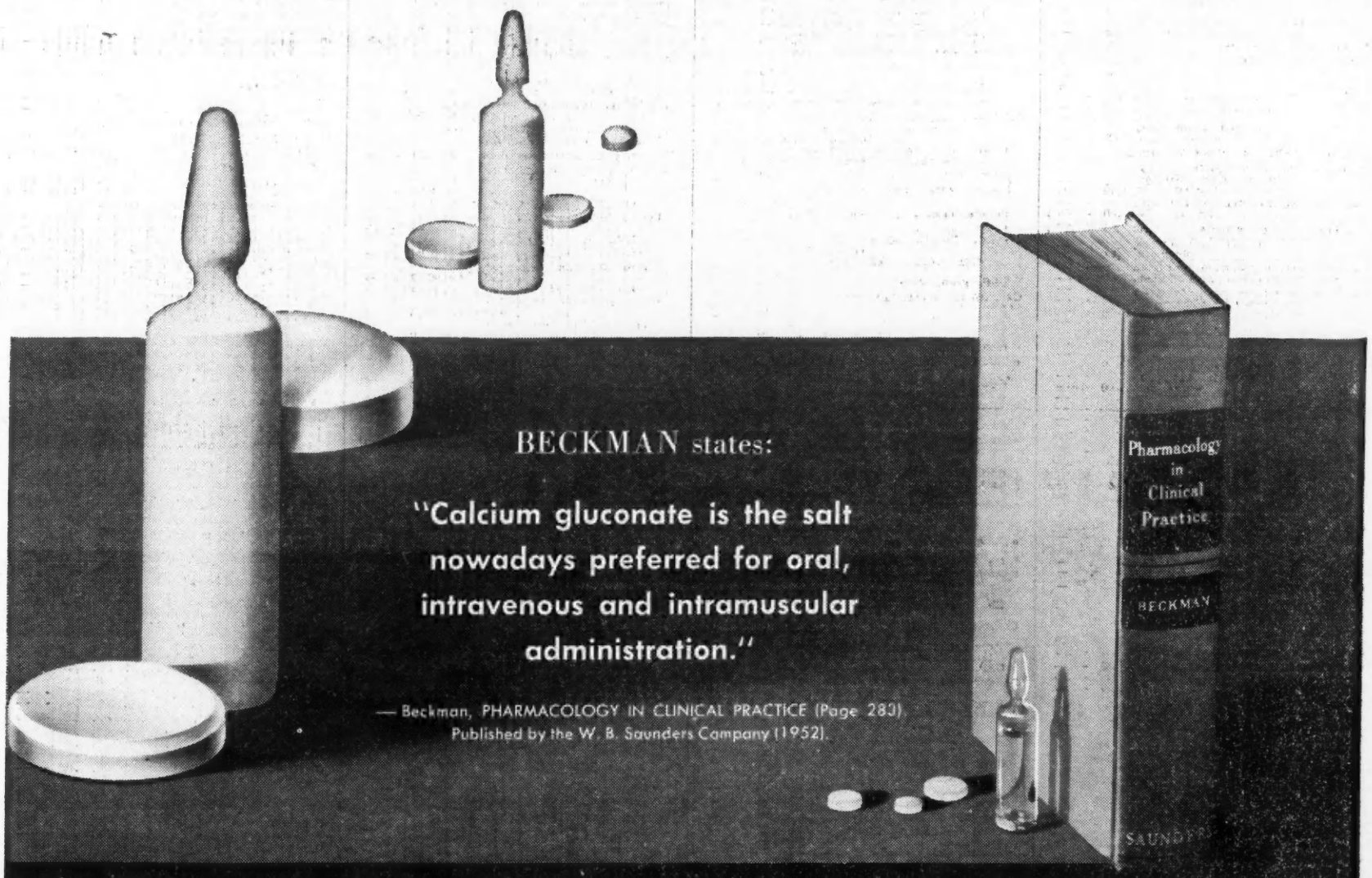
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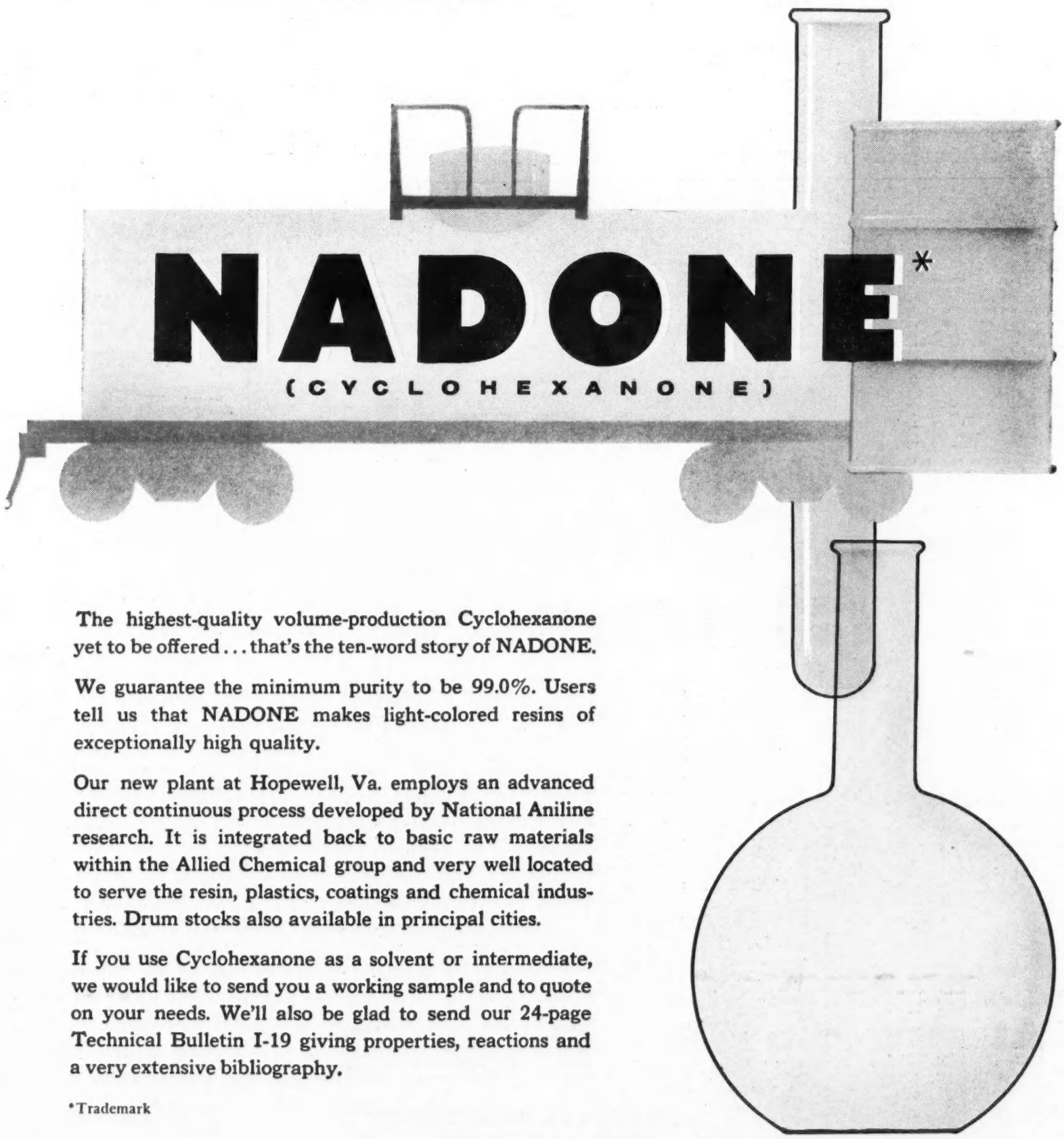
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 — dms., ton lots, same basis lb. .23 - — dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms. frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Batavia, "A," bls. lb. .19½- — "B" lb. .18¼- — "C" lb. .17¼- —
Korintje "A" lb. .19½- — "B" gal. .18¼- — "C" lb. .17¼- —
Cassia oil (see Cinnamon leaf oil, USP).
Castor beans, bgs. f.o.b. Brazil ton.125.00-127.00
Castor oil, dom. blown, dms. c.l. lb. .2800- — dms., l.c.l. lb. .2900- —
dehydrated, bodied, dms., c.l lb. .2960- — dms., l.c.l. lb. .3060- — tanks lb. .2750- —
dehydrated, unbodied, dms., c.l. lb. .2810- — dms., l.c.l. lb. .2910- — tanks lb. .2610- —
hydrogenated, bgs., ton lots lb. .3275- — bgs., l.c.l., dlvd lb. .3475- —
No. 1, dom., dms., c.l. lb. .2450- — dms., l.c.l. lb. .2550- — tanks lb. .2250- —
No. 3, tech., dms., c.l. lb. .2375- — dms., l.c.l. lb. .2475- — tanks lb. .2175- —
Refd. and deodorized, dms., c.l. lb. .2900- — dms., l.c.l. lb. .3000- —
USP, dms., c.l. lb. .2600- — dms., l.c.l. lb. .2700- — tanks lb. .2400- —
Imp., No. 1, Brazilian, tanks lb. .18¼- .18½
Castor oil, sulfonated, 50% dms., works lb. .15 - .15¼
75%, dms., works lb. .19½- .20
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
split, dms lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton.45.50 Nom.
Castoreum, nat., cns. lb. 5.25 -30.00
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. .75 - —
Caustic potash (see Potash, caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII, cns., dms. lb. 3.45 - 4.50
Cedarwood oil, cns., dms lb. .55 - .60
Celery seed, French, bgs lb. .29 - — Indian, bgs. lb. .24½- .25
Celery seed, oil, bots. lb.16.50 -17.50
Cellulose acetate, flake, powd., bgs., ctns., 100-lb. lots or more, dlvd E lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd, E lb. .595 - .605
38% butyryl content, bgs. dlvd, E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd E lb. .545 - .555
50% butyryl content, bgs. dlvd, E lb. .585 - .595
Cellulose gum, pure, high vis. bgs., 23,000-lb. lots or more, works, frt. alld lb. .57 - — bgs., smaller lots, same basis, lb. .59 - —
Cerium chloride, 48% dms. dlvd lb. .30 - —
Cerium hydrate, 74% CeO, fib. dms., 100-lb. lots or more lb. 1.44 - — 77%CeO, fib. dms. 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb 1.85 - 1.98 bgs., smaller lots, dlvd lb 2.03 - 2.23
Cetyl alcohol, extra fib cns., 500-lb. lots or more lb. .65 - .72 NF, fib cns. 140-lb. lots or more lb. .48 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, bls lb 1.50 - — Roman, cs lb. 3.50 - —
Chamomile oil, blue, Hungarian bots lb.350.00 - —
Charcoal, activated, NF, fib. dms., c.l. works lb. .25 - .32 fib dms. 5-ton lots, works lb. .26½- .32½ fib. dms. smaller lots, works, lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone, black).
Charcoal, hardwood, bulk, lump, c.l., f.o.b. plant ton 55.00 - — briquets, bulk, c.l., f.o.b. plant ton.78.00 -80.00 5-lb paper bgs. c.l., same basis ton.106.00 — 10-lb. paper bgs. c.l., same basis ton.96.00 - — 25 lb paper bags, c.l., f.o.b. plant ton.87.00 - —
Charcoal, hardwood, briquets, 40-lb. paper bgs., c.l., same basis ton.84.00 - — Pinewood gran. bgs., c.l., works South ton.69.00 - — bgs., l.c.l., works, South ton.74.00 -79.00
Pinewood, lump, bgs. c.l., works, South ton.66.00 - — bgs., l.c.l., works, South ton.70.00 -84.00 bulk, c.l., works, South ton.50.00 - — bulk, t.l., works, South ton.55.00 - —
Chenopodium oil, NF, cns lb. 5.25 - 6.00
Chestnut extract, imp. solid, 60% tannin, bgs., ex dock lb. .08727- — powd., 68% tannin, bgs., ex dock lb. .09817- —
Chicago acid, paste, bbls. frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min dms., c.l., works lb. .23 - — dms., l.c.l., works lb. .24 - — tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb 1.00 - — jars, 500-lb. lots lb 1.03 - — jars, 100-lb. lots or less lb 1.05 - —
Chloramine T, NF, bbls. works lb. .75 1.00
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - — dms. l.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .66 - — Clarified, dms., c.l., frt. alld lb. .69 - — dms., l.c.l., 5,000 to 10,000-lb. lots, frt alld lb. .70 - —
Chlorinated paraffin, 40%, dms., c.l. frt. alld lb. .16¼- — dms. l.c.l. 10 dms or more, same basis lb. .17¼- — 70%, dms., c.l., same basis lb. .18½- — dms., l.c.l. 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - — ctns., l.c.l., works lb. .61 - — 125, 1,000 cps. ctns., c.l., works. lb. .70 - — ctns., l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - — cyls., l.c.l., Metropolitan area lb. .12½- .13¾ tanks, single units, works, frt. equald 100 lbs. 3.15 - — tanks, multiple units, 5 cars, works, frt equald 100 lbs. 4.05 - —
Chlorine, liq., tanks, multiple units, 2 cars, same basis 100 lbs. 4.25 - — tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - — tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - —
Chloroacetic acid, mono, flake, 99% dms. c.l lb. .23½- .25½ dms., l.c.l. lb. .24½- — tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - — dms., l.c.l., frt. equald lb. .20 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., min. 10,000 lbs., or over, frt. alld lb. 75 - — dms., less than 10,000 lbs., same basis lb. .80 - — tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - — dms., l.c.l., same basis lb. .54 - — tanks, same basis lb. .50 - —
p-Chloroaniline, dms. c.l., frt. alld. lb. .77 - — dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area lb. 1.05 - — dms., l.t.l., same basis lb. 1.20 - — dms., 500 to 1,500 lbs. same basis. lb. 2.00 - —
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works, dlvd. to N. Y. Metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - — fib. dms., smaller lots works lb. 1.25 - —
p-Chlorobenzoic acid, fib dms., 2,000-lbs. or more, works. lb. 2.25 - — fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l. dlvd. E lb. .18 - — dms., l.c.l., same basis lb. .19 - — tanks, same basis lb. .17 - —
USP, dms. lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - — Powd., dlvd. E., 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .80½- —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - — dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - — dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., bots. lb. 1.50 - —
Coml., cyls., 180 lbs., frt. alld lb. .95 - — cyls., 100 lbs., same basis lb. .97 - — cyls., 25 lbs., same basis lb. 1.22 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- — dms., l.c.l., frt. equald lb. .0515- — tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher.
Choline bitartrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 .42
blue content 16-30%, bbls., same basis lb. .40 .42
blue content 31-45%, bbls., same basis lb. .41 .43
blue content 45-49%, bbls., same basis lb. .44 .46
Reduced color, 25% lb. .19 - .20
Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.) Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Jospch; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago
Chrome orange, CP, bbls., dlvd. N. of Tennessee and N. C., E. of Miss. R. include Davenport, Tenn. and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —
Chrome orange prices are ½c. higher dlvd Ala., Fla., Ga., La. (Shreveport 1½c.) Miss. N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Chrome yellow, CP bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .35 - —
Chrome yellow price are ½c. higher dlvd. Ala., Fla., Ga., La., (Shreveport 1½c. higher); Miss., N. C., S. C., Tenn.; Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids Des Moines, Kansas City Lincoln, Omaha, St. Joseph 1.6c. higher; Dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City Wichita prices are equalized with Chicago.
Chromic acid, 99¾% dms., c.l., works, frt. equald lb. .29½- — dms., l.c.l., dlvd New York Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, bbls., works lb. .09½- — cbys., works lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms. c.l. frt. alld lb. 1.20 - — Pure, bgs., c.l., frt. alld lb. .44¾- — bgs., l.c.l., same basis lb. .45½- —
Chromium trioxide, NF bots lb. 1.15 - —
Cinchona bark, NF red, broken, bgs. lb .35 - .40 NF, yellow, broken bgs lb .35 - 40
Cinnamic acid, refd., bots lb 2.50 - 3.50
Cinnamic alcohol, bots lb. 2.15 - 2.75
Cinnamic aldehyde dms lb. .95 1.25
Cinnamon, Ceylon, No. 2, bgs. lb. .94 - — Ceylon, "0000," bgs., afloat lb. 1.11 - —
Cinnamon bark oil, bots lb.36.00 -70.00
Cinnamon leaf oil, crude, dms lb 1.60 2.00
USP (Cassia), cns., dms lb. 8.50 -12.00
Citral, bots., cns lb. 4.40 - 5.70
Citric acid, USP, anhyd., fine gran., bgs. dms. c.l lb. .29½- .30 bgs. dms. 10,000-lb. lots, 1 shipt lb. .30 - .30½ bgs., dms. smaller lots lb. .30½- .31
hydrous, fine gran., ogs., dms., c.l lb. .27½- .28 bgs. dms. 10,000-lb. lots, 1 shipt lb. .28 .28½ bgs. dms. smaller lots lb. .29 .29½
Powdered citric acid ½c. higher.
Citronella oil, Ceylon, cns., dms lb. .70 - 1.25
Java, cns lb. 1.10 - 1.15
Java-type, cns lb. .82 - .85
Citronellal, bots., dms. lb. 2.05 - 2.20
Citronellol, bots., dms lb. 3.25 3.60
Civet, artif. bots lb.13.75 15.00
Nat. bots oz 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton.16.50 -21.50
crushed, shed moisture, bulk, c.l., Tenn ton. 8.00 -11.00
purif., bgs., c.l., Tenn ton.16.50 -21.50
imp., airfloated, bgs., c.l., Atl. port net-ton.42.00 -45.00
lump, bulk, Atl. port net-ton.29.50 -30.00
Clay, China, dom., dry grd., air floated, 99%, 325 mesh, Georgia, bgs., c.l., works.ton.10.00 - — Georgia, bgs. l.c.l., works. ton.15.50 - —
300 mesh, bgs., c.l., Georgia, works ton.13.50 -14.50
bgs., l.c.l., same basis ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 —
bgs., l.c.l. ex whse net ton.60.00 -65.00
Cleve's acid, mixed, bbls lb 1.05 —
Clove, Madagascar, bgs. lb. .41 - —
Zanzibar, bgs. lb. .51 - —
Clove bud oil, USP, cns., dms. lb. 2.40 - 2.75
Clove leaf oil, crude, dms. lb. .90 - .95
CMC, crude, 96.4%, low or medium vis., bgs. or fib dms., 23,000 lbs. dlvd. E., 100% basis lb. .39½ .41
bgs. or fib dms., less than 23,000 lbs. dlvd E., 100% basis lb. .41½ .43
crude, 65%, low or medium vis., bgs. or fib. dms., c.l., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .41½- .43
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs. works, frt. alld. lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale for soins., dms., c.l., ex whse gal. .30½- — dms., l.c.l., ex whse gal. .33½- — tanks, works gal. .17 —
Refd., resale, indust., dms., c.l., ex whse gal. .30½ .35 dms., l.c.l., ex whse gal. .33½ .39 tanks, works gal. .16½ .20½
Coaltar pitch, aluminum, bulk, works ton.40.00 -42.00
Carbon and indust., bulk, works. ton.40.00 - —
Core, bulk, works ton.36.50 - —
Fiber, bulk, works ton.44.00 - —
Roofing, 140-155°F., Federal Specification RP-381, Type I, tanks, works ton.41.00 - —
Cobalt acetate, 23.7% Co, dms., dlvd. lb. 1.10 - —
Cobalt blue, genuine, 250-lb. bbls., dlvd. N of Tenn. and N. C., E of Miss R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.90 - —
Cobalt blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co, powd., bgs., dlvd lb. 1.57 - —
Cobalt chloride, 24.2% Co, dms., dlvd lb. 1.05 - —
Cobalt hydrate, 60-61% Co, dms., dlvd lb. 2.20 - —
Cobalt linoleate, fused 8½% Co, dms lb. .68 - — Liq., 6% Co, dms lb. .54¾- —
Cobalt metal, 97-99%, kgs., ex whse. lb. 2.00 - —
Cobalt naphthenate, liq., 6% Co, dms., dlvd lb. .46½- —
Cobalt nitrate, 20.1% Co, bbls. dlvd. lb. .85 - —
Cobalt oxide, black, 72½-73½% Co, kgs lb. 1.52 - — 70-71% Co, kgs lb. 1.48 - —
Cobalt phosphate, powd., 32.1% Co, kgs., dlvd lb. 1.43 - —
Cobalt resinate, fused, 3% Co, dms. lb. .28 - —
Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —
Monohydrated, 33% Co, dms., dlvd lb. 1.17 - —
Cobalt tallate, 6% Co, dms., dlvd. lb. .42 - —
Cocaine, USP, cns., 100-oz. lots oz.17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz.13.75 - —
Cocillana bark, bls lb. .25 - —
Cocoa butter, bgs. lb. .95 - 1.00
Coconut oil, crude, tanks, New York lb. .14¼- — tanks, Pac. coast lb. .13⅜- — Refd., deodorized, dms., l.c.l. lb. .24 - —
Coconut oil acids, dist., dms. lb. .22½- .25 tanks lb. .20 - — double (stripped), dms. lb. .23½- .26 tanks lb. .21 - —
Cod oil, Newfoundland, dms. lb. .11¼- .11⅜
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms gal. 1.50 - 1.55
Cohosh root, black, bls. lb. .20 - .22 Blue, bls. lb. .20 - .22
Colchicine, USP, bots., cns. oz.29.00 -35.50
Colchicum root, bls. lb. .35 - —
Colchicum seed, bgs. lb. .55 - —
Collodion, USP, dms. lb. .32½- — Flexible, dms. lb. .34 - —
Colocynth pulp, bls. lb. .72 - —
Colombo root, bls. lb. .15 - .16
Congo copal gum, No. 1, bgs. lb. .25 - .26 No. 2, bgs. lb. .22 - .24 No. 3, bgs. lb. .15¾- .17
Copaiba balsam, cns., dms. lb. .65 - .75
Copaiba oil, cns. lb. 1.75 2.50
Condurango bark, bls. lb. .26 - —
Copper acetate, bbls., c.l., works. lb. .53 - — bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3175- — bgs., l.c.l., works lb. .3325- —
Copper chloride, cupric, anhyd., dms., works lb. .42 - .42½
Cryst., dihydrate, dms., works. lb. .28¼- .28¾ Cryst., dried, dms., works lb. .36½- .37
Copper chloride, cuprous, dms., works lb. .4068- 4468
Copper cyanide, tech, dms., 20,000-lb. lots or more lb. .666 - — dms., 1,000-lb. lots or more lb. .676 - — dms., smaller lots lb. .696 - .716
Copper gluconate, dms. lb. 3.20 - —
Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .48¼- — dms., l.c.l., same basis lb. .48¾- —
Copper metal, electrolytic, dlvd. Valley basis lb. .28½- —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —
Copper nitrate, tech., cryst., dms., works lb. .29¼- .31¼
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-1,999-lb. lots, works lb. .43 - —
Copper oxide, red, 97% USN Type I, bbls., 100-5,000-lb. lots, lb. .43 - — 90% USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .41 - —
Copper oxychloride, dms., c.l., works lb. .52 - — dms., l.c.l., works lb. .53½- .63½
Copper quinolinolate, fib. dms. lb. 4.25 - 4.50
Copper resinate, precip., dms., frt. alld lb. .34 - —
Copper sulfate, CP, gran., dms., works lb. .1845- —
Cryst., 99% bgs., c.l., works. 100 lbs.11.55 - — bgs., l.c.l., same basis 100 lbs.12.05 -14.55
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.21.15 - — dms., l.c.l., works 100 lbs.21.90 - —
Tribasic, distributors, bgs., c.l., same basis 100 lbs.25.45 - — bgs., l.c.l., same basis 100 lbs.26.45 -29.45
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton.180.00 - — Pac. ports, c.i.f. ton.175.00 - —
Coriander oil, USP, bots. lb. 9.00 -12.50
Coriander seed, Moroccan, bgs lb. .09½- — Rumanian, bgs. lb. .07½- — Yugoslavian, bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .15¾- — Foots (soapstock) acid 95%, tanks, New York lb. .06½- — Refd., salad, dms. lb. .2135- .2150 tanks lb. .1935- —
Corn oil acids, dist., dms. lb. .17¼- .20 tanks lb. .14¾- —
Corn starch (see Starch, corn).
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.33 - — paper bgs., l.c.l. 100 lbs. 7.58 - —
Corn syrup, 42° Be, non-ret. dms., c.l., 100 lbs. 7.31 - — non-ret. dms., l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bulk gram. 3.50 - 3.55
Costus oil, bots. oz. 6.00 - —
Cottonseed meal, 41% bgs., Memphis ton.55.00 - —
Cottonseed oil, crude, tanks, South, East lb. .15 Nom. tanks, Valley lb. .14⅜- .14¾ tanks, Texas, Lubbock lb. .14 Nom. tanks, Texas, Waco lb. .14¼ Nom.
Foots (soapstock) acid 95%, tanks, New York lb. .05¾- — Refd., salad, dms. lb. .20⅜- .20½ tanks lb. .18⅜- —
Cottonseed oil acids, dist., dms lb. .16¾- .19¼ tanks lb. .14¼- —
Cottonseed pitch, raw, dms., works. lb. .03 - .03¼ tanks, same basis lb. .02¾- —
Coumarin, NF, cryst., dms. lb. 3.60 - 3.70
Cramp bark, NF, bls. lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - — crude, soln. 80%, tanks, works, gal. .226 - — refd., dms., c.l., works gal. .42 - .44 dms. l.c.l. same basis gal. .53 - .55 tanks same basis gal. .33 - .35
Creosote oil (see Creosote coaltar).
Creosote, wood, beechwood, cbys., dms lb. 1.60 - 1.65
Hardwood, NF, bots., cbys lb. 1.30 - —
Creosote, pinewood, dms., incl., c.l., works lb. .0561- — dms. incl., l.c.l., works lb. .0634- — dms. incl., l.c.l., ex whse, New York lb. .0745- — tanks, works lb. .0460- —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - — dms., smaller lots, works lb. .72 - —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- — non-ret. dms., l.c.l., same basis lb. .17½- — tanks, same basis lb. .145 - —
Cresol, USP, non-ret. dms., c.l., same basis lb. .18 - — non-ret. dms., l.c.l., same basis lb. .19 - — tanks, same basis lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - — dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .18 - — dms., l.c.l., same basis lb. .19 - — tanks, same basis lb. .16 - —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald lb. .22 - — dms., l.c.l., same basis lb. .23 - — tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald lb. .17 - — ret. dms. l.c.l., same basis lb. .18 - — tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- — ret. dms., l.c.l., same basis lb. .17½- — tanks, same basis lb. .14½- —

the highest quality you can get
in any quantity you can use!



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We guarantee the minimum purity to be 99.0%. Users tell us that NADONE makes light-colored resins of exceptionally high quality.

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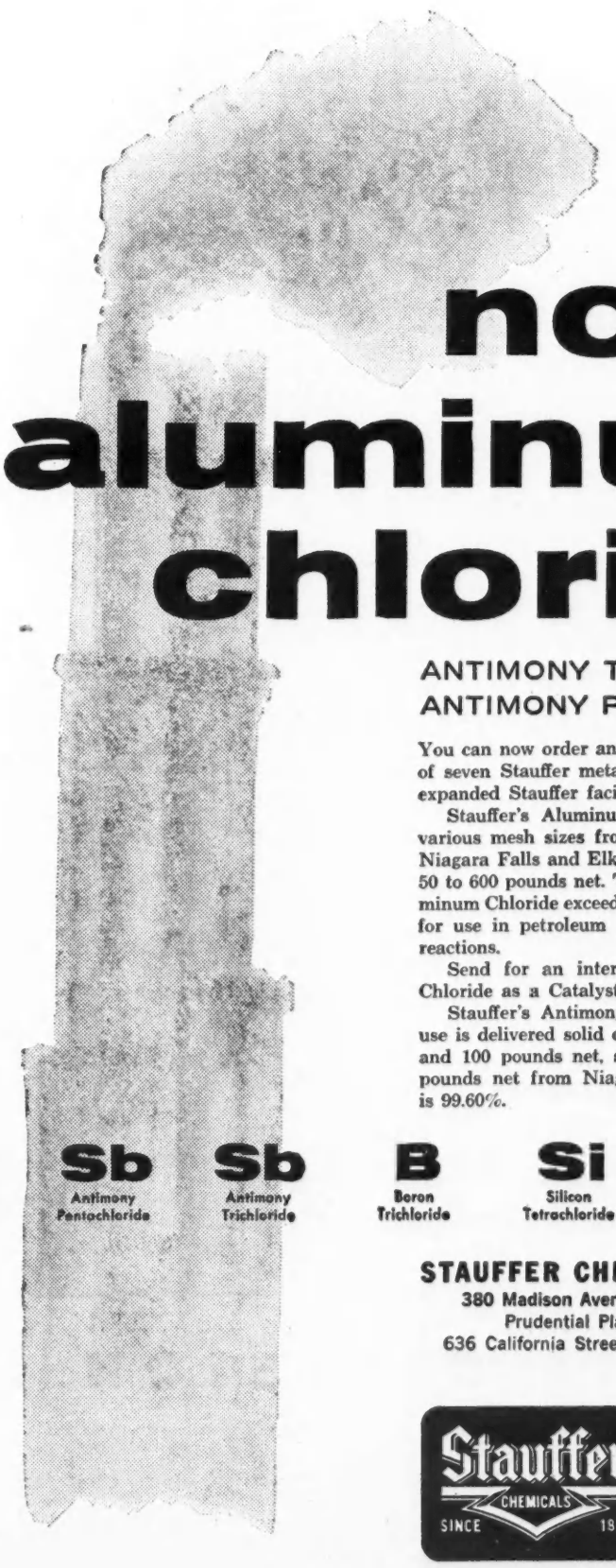
o-Cresol—o-Dianisidine

o-Cresol, m.p. 29°-29.9° C., dms., c.l., frt. equald	lb.	.16	—
ret. dms., l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.14	—
25-28.9° C., dms., c.l., frt. equald.	lb.	.15	—
ret. dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb	.13	—
p-Cresol, 98% dms., c.l. dlvd	lb.	.52	—
dms., l.c.l., dlvd	lb	.53	—
tanks, dlvd.	lb	.49	—
p-Cresyl methyl ether, cns	lb	1.30	2.05
Cresylic acid, coaltar dom., meta-para content above 25%, resins and tricresyl phosphate grades, tanks, frt. equald.	gal.	1.15	—
c.l., t.l., same basis	gal	1.35	—
l.c.l., same basis	gal.	1.40	—
Meta-para content 25% or less, tanks, frt. equald	gal.	1.00	—
c.l., t.l., same basis	gal.	1.20	—
l.c.l., same basis	gal.	1.25	—
Imported, meta-para content, 25% or less, tanks, f.o.b., New Jersey area, frt. equald to competitive points	gal.	1.00	—
Cresylic acid, petroleum, dom. 195° to 214° C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles	gal.	.80	—
l.c.l., same basis	gal.	.82	.84
tanks, same basis	gal.	.65	—
200° C. to 232° C., tanks, Wilmington, Cal	gal.	.65	.72
Cresylic acid, petroleum, dom., 211° C. to 237° C. non-ret. dms., c.l., San Francisco and Los Angeles	gal.	.76	—
non-ret dms., l.c.l., same basis	gal.	.78	.80
tanks, same basis	gal.	.61	—
220° C. to 242° C., tanks, Wilmington, Cal	gal.	.62	.67
245° to 295° C., tanks, Wilmington, Cal	gal.	.50	—
Crotonaldehyde, 91-93%, dms., l.c.l., works	lb.	.24¼-	.25
Crotonic acid, fib dms., 200 lbs or more, works	lb.	.50	—
Cryolite, nat., indust., bgs., c.l., works	100 lbs.	13.00	—
bgs., l.c.l., works	100 lbs.	14.25	—
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works	lb.	.29	—
Cubeb berries, XX, NF, bgs	lb.	.80	—
Powd., cs	lb.	.95	—
Cubeb oil, cns.	lb.	8.50	12.00
Cumene, dms., c.l., works	lb.	.12	—
dms., l.c.l., works	lb.	.14	—
tanks, works	lb.	.11	—
Cumin seed, Iranian, bgs	lb.	.24	—
Moroccan, bgs.	lb.	No prices.	
Turkish, bgs	lb.	No prices.	
Cumin oil, bots., cns.	lb.	4.75	7.55
Cutch extract, 55% tannin, bgs., ex dock	lb.	.07½-	—
Cyanamide, fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract	ton.	55.00	—
pulv., 21% N, bgs., works. unit-ton.		2.75	—
Cyanamide, indust., grade, bgs., c.l., works	ton.	75.00	—
bgs., l.c.l., works	ton.	96.00	—
6-16 mesh, dms., c.l., works	ton.	120.00	—
dms., l.c.l., works	ton.	140.00	—
Cyanoacetic acid, tech., bbls	lb.	.90	1.25
Cyclohexane, 99% tech., dms., c.l., works	gal.	.70	—
dms., l.c.l., works	gal.	.72	—
tanks, works	gal.	.55	—
Cyclohexanol, tech., dms., c.l., works, frt. alld., E.	lb.	.26½-	—
dms., l.c.l., works, same basis	lb.	.27½-	—
tanks, works, same basis	lb.	.24	—
Cyclohexanone, tech., dms., c.l., works	lb.	.32½-	—
dms., l.c.l., works	lb.	.35	—
tanks, works	lb.	.29	—
Cyclohexene, min. 96% b.r., 82.5° C. 85° C., 360-lb. dms., c.l., works	lb.	.55	—
360-lb. dms., l.c.l., same basis.	lb.	.60	—
tanks, same basis	lb.	.52	—
Cyclohexylamine, dms., c.l., works.	lb.	.49	—
dms., l.c.l., works	lb.	.50	—
tanks, works	lb.	.47	—
Cyclopropane, CP, 2-lb. cyls., works.	cyl.	48.00	—
6-oz. cyls., works	cyl.	12.00	—
USP, hospitals, cyls., 40-gal. lots.	gal.	.42	—
cyls., 100-gal. lots	gal.	.41	—
cyls., 200-gal. lots	gal.	.40	—
Cypress oil, bots	lb.	5.30	—

D

2,4-D tech., bags., dms., c.l., works, frt. equald.	lb.	.40	—
bgs., dms., l.c.l., same basis	lb.	.45	.49
2,4-D butyl ester, dms., c.l., works	lb.	.43	—
dms., l.c.l., same basis	lb.	.48	.52
tanks, same basis	lb.	.42	—
2,4-D isopropyl ester, dms., c.l., works	lb.	.43	—
dms., l.c.l., works	lb.	.48	.52
tanks, works	lb.	.42	—
Dammar gum, Batavia, A/E, cs.	lb.	No stocks.	
dust, bgs.	lb.	No stocks.	
E, bgs.	lb.	No stocks.	
East India, Batu, bold, bgs.	lb.	.13¾-	.15
nubs and chips, bgs.	lb.	.08¼-	.09¼
black, bold, bgs.	lb.	.14½-	.16½
unscraped, bgs.	lb.	.13 -	.14½
nubs and chips, bgs.	lb.	.12¼-	.13½
pale, chips, bgs.	lb.	.13 -	.15
nubs, bgs.	lb.	.17¾-	.20
Siam, cs.	lb.	.35 -	.39
Singapore, No. 1, bgs.	lb.	.41 -	.45
No. 2, bgs.	lb.	.31¼-	.34
No. 3, bgs.	lb.	No stocks	
dust, bgs.	lb.	.17 -	.19
seeds, bgs.	lb.	No stocks.	
Dandelion root, bls.	lb.	.28	—
DDD, tech., flake, grd., fib. dms., c.l., works	lb.	.45 -	.47
fib. dms., l.c.l., works	lb.	.46 -	.48
DDT, flake or lump, bgs., c.l., works, dlvd	lb.	.21	—
bgs., smaller lots, same basis	lb.	.23	—
refy., dms., c.l., same basis	lb.	.22	—
fib. dms., smaller lots, same basis	lb.	.24	—
Powdered DDT 1c. per pound higher.			
1-Decanol, tech., dms., c.l., dlvd	lb.	.41	—
dms., l.c.l., dlvd.	lb.	.43	—
tanks, dlvd.	lb.	.38½-	—
Decyl alcohol, mixed isomers, dms., c.l., dlvd	lb.	.23½-	—
dms., l.c.l., dlvd.	lb.	.24½-	—
tanks, dlvd.	lb.	.21	—
Perfume grade, bots	lb.	1.75	2.00
Decyl alcohol, normal (see 1-Decanol).			
Deertongue leaves, bls.	lb.	.45	—
Defluorinated phosphate, feed grade, 13% P, paper bags., c.l., t.l., works	ton.	49.50	—
Feed grade, 17% P, paper bgs., c.l., t.l., works	ton.	58.00	—
18% P, paper bgs., c.l. t.l., works	ton.	64.10	—
19% P, paper bags, works. Houston, Tex., c.l. and t.l.	per ton.	69.50	—
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.			
Degras, common, bbls.	lb.	.10	.12
Neutral, bbls.	lb.	.21	.23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms, c.l., dlvd. E. of Rockies	gal.	.64½-	.66
dms., l.c.l., same basis	gal.	.68½-	.77
tanks, dlvd., same basis	gal.	.48½-	.50
Tankcar sales require written autnorization by Alcohol and Tobacco Tax Division.			
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies	gal.	.66	—
dms., l.c.l., same basis	gal.	.71	.77
tanks, same basis	gal.	.50	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.			
SD1, dms., dlvd. E. of Rockies.	gal.	.65½-	—
dms., l.c.l., same basis	gal.	.70½-	.76½
tanks, same basis	gal.	.49½-	—
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.64	—
dms., l.c.l., same basis	gal.	.69	.75
tanks, same basis	gal.	.48	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.63	—
dms., l.c.l., same basis	gal.	.68	.74
tanks, same basis	gal.	.47	—
SD23A, dms., c.l., dlvd. E. of Rockies	gal.	.655	—
dms., l.c.l., same basis	gal.	.705	.765
tanks, same basis	gal.	.495	—
SD23H, dms., c.l., dlvd. E. of Rockies	gal.	.66	—
dms., l.c.l., same basis	gal.	.71	.77
tanks, same basis	gal.	.50	—
SD29, dms., c.l., dlvd. E. of Rockies	gal.	.645	—
dms., l.c.l., same basis	gal.	.695	.795
tanks, same basis	gal.	.485	—
SD30, dms., c.l., dlvd. E of Rockies	gal.	.63	—
dms., l.c.l., same basis	gal.	.68	.74
tanks, same basis	gal.	.47	—
SD25A, dms., c.l., dlvd. E. of Rockies	gal.	.66	—
dms., l.c.l., same basis	gal.	.71	.77
tanks, same basis	gal.	.50	—
SD40, dms., c.l., dlvd. E. of Rockies	gal.	.64	—
dms., l.c.l., same basis	gal.	.69	.75
tanks, same basis	gal.	.48	—
For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.			
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.			
d-Desoxyephedrine hydrochloride, bots	lb.	24.00	25.00
dl-Desoxyephedrine hydrochloride, bots	lb.	6.50	—
Dextrin, corn, gum, paper bgs., c.l.	100 lbs.	9.38	—
paper bgs., l.c.l	100 lbs.	9.53	—
canary dark, paper bgs., c.l.,	100 lbs.	9.22	—
paper bgs., l.c.l	100 lbs.	9.37	—
light, paper bgs., c.l.	100 lbs.	9.12	—
paper bgs., l.c.l	100 lbs.	9.27	—
white, paper bgs. c.l.	100 lbs.	8.96	—
paper bgs., l.c.l	100 lbs.	9.11	—
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.			
Dextrin, potato imp., bgs.	lb.	.10½-	.11
Dextrose, USP, dms.	lb.	.19¾-	—
Anhyd., dms.	lb.	.20¾-	—
Diacetone alcohol, acetone-free, dms., c.l., dlvd	lb.	.15½-	—
dms., l.c.l., dlvd.	lb.	.16½-	—
tanks, dlvd.	lb.	.13	—
Tech., dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd.	lb.	.16	—
tanks, dlvd	lb.	.12½-	—
Diacetyl, flavor grade, bots.	lb.	4.30	4.55
Di-sec-amyl phenol, dms., c.l., works	lb.	.32	—
dms., l.c.l., works	lb.	.33	—
tanks, works	lb.	.29½-	—
Di-tert-amyl phenol, dms., c.l., works	lb.	.32	—
dms., l.c.l., works	lb.	.33	—
tanks, works	lb.	29½-	—
o-Dianisidine, fib., dms.	lb.	2.00	—



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Sb Antimony Trichloride
B Boron Trichloride
Si Silicon Tetrachloride
Ti Titanium Tetrachloride
Zr Zirconium Tetrachloride

STAUFFER CHEMICAL COMPANY
380 Madison Avenue, New York 17, N. Y.
Prudential Plaza, Chicago 1, Ill.
636 California Street, San Francisco 8, Calif.

Stauffer CHEMICALS SINCE 1885

Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
dms., l.c.l., same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots, lb. .55 - —
Dibutyl fumarate, dms., c.l., t.l., frt. alld lb. .33 - —
dms., l.c.l., t.t.l., frt. alld lb. .34 - —
tanks, frt. alld lb. 30½- —
Dibutyl maleate, dms, c.l., t.l., frt. alld lb. .33 - —
dms., l.c.l., t.t.l., dms., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½- —
Dibutyl phthalate, dms., c.l., divd. E. lb. .32½- —
dms., l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 - —
Dibutyl sebacate, dms., c.l., works. lb. .70 - —
dms., l.c.l., works lb. .70½- —
tanks, works lb. .68 - —
Dibutyl tartrate dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., divd lb. .55½- —
dms., l.c.l., same basis lb. .56½- —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., divd lb. 1.20 - —
dms., t.l.l., divd lb 1.24 - —
Feed grade, to vitamin premix distributors dms., c.l., t.l., divd lb. 1.05 - —
dms., l.c.l., same basis lb. 1.07 - —
Tech., dms., c.l., divd lb. .91 - —
dms., l.c.l., divd lb. .95 - —
tanks, divd. lb. .86 - —
Dicapryl phthalate, dms., c.l., divd. lb. .31 - .32
dms., l.c.l., divd. lb. .32 - .33
tanks, divd lb. .27½- —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Dichlorophenoxyacetic acid (see 2,4-D)
2,5-Dichloroaniline, dms., works lb. .83 —
o-Dichlorobenzene, dms. c.l., frt. alld. E lb. .12¾- —
dms., l.c.l, same basis lb. .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. allwd. E lb. .14½- —
dms., 2,000 lbs. or more, same basis lb. .19½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or t.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
2,2-Dichloroethyl ether, c.l., t.l., divd. E lb. .15½- —
l.c.l., t.t.l., same basis lb. .16½- —
tanks, same basis lb. .13 - —
Dichloropentanes dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works. lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
fib. dms., l.c.l., same basis lb. .59¼- .60
Didecyl phthalate, dms., c.l., works. lb. .34 - —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31½- —
Dieldrin, dms., frt. alld lb. 1.80 - —
dms., l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms. c.l., divd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½- —
Diethyl barbituric acid (see Barbital).
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
dms., l.t.l., same basis lb. .18½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
dms., l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., divd lb. .69½- —
dms., l.c.l., divd lb. .70½- —
tanks, divd lb. .67 - —
Diethyl oxalate, dms., c.l., frt. alld. lb. .42 - —
dms., l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Diethyl phthalate dms., c.l., divd. lb. .31½- —
dms., l.c.l., divd. lb. .32½- —
tanks, divd lb. .29 - —
Diethyl sulfate, dms., c.l., works lb. .19¼- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethylamine, dms., c.l., divd E lb. .52 - —
dms., l.c.l., same basis lb. .53 - —
tanks, same basis lb. .49½- —
N,N-Diethylaniline dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene dms., t.l., frt. alld. dms., l.c.l. same basis lb. .18½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate)
Di-2-ethylhexyl phthalate (see Dioctyl phthalate)
Diethylene glycol, dms., c.l., divd. E lb. .17¾- —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
lb. .16½- —
Diethylene glycol monobutyl ether, lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, divd E lb. .28¾- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works, lb. .30¼- —
dms., l.c.l., works lb. .31 - —
tanks, divd. E lb. .28¼- —
Diethylene glycol monoethyl ether, dms., c.l., divd lb. .22½- —
dms., l.c.l., divd lb. .23½- —
tanks, divd lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, divd. E lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., divd lb. .20½- —
dms., l.c.l., divd lb. .21½- —
tanks, divd lb. .18¼- —
Diethylenetriamine, dms., c.l., divd. E lb. .44 - —
dms., l.c.l., divd. E lb. .45 - —
tanks, divd. E lb. .41½- —
Diethylstilbestrol, USP bots., 10-kilo lots kilo 100.00 -147.50
bots., 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms lb. 1.20 —
Digitoxin, USP, bots gram. 4.35 - 4.75
Diglycol laurate, dms. lb. .32¾- .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycolic acid, bgs., works lb. .14 - —
Dihexyl sebacate, dms., c.l., works, lb. .64 - —
dms., l.c.l., works lb. .64½- .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0850- .0875
Dihydrostreptomycin sulfate, bulk, gram. .0850- .0875
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., divd. lb. .17 - —
dms., l.c.l., divd lb. .18 - —
tanks, divd lb. .14½- —
Di-isobutyl phthalate, dms., c.l., divd. E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., divd. E lb. .10 - —
dms., l.c.l., divd. E lb. .11½- —
tanks, divd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., divd lb. .31 - —
dms., l.c.l., same basis lb. .32 - —
tanks, same basis lb. .28½- —
Di-iso-octyl sebacate, dms., c.l., works lb. .63½- —
dms., l.c.l., works lb. .64½- —
tanks, works lb. .61 - —
Di-isopropanolamine, dms. c.l., divd. lb. .24½- —
dms., l.c.l., same basis lb. .25½- —
tanks, same basis lb. .22 - —
Di-isopropylamine, dms., c.l., divd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs. lb. .12 - —
Nat., bgs. lb. .12 - —
Dillseed oil, bots lb. 2.80 4.25
Dillweed oil, dom., bots., dms. lb. 3.75 - 4.00
Dimethyl anthranilate, cns. lb. 4.85 - 5.10
Dimethyl ethanolamines, anhyd., dms., c.l., divd lb. 1.225 - —
dms., l.c.l., divd lb. 1.235 - —
tanks, divd lb. 1.20 - —
70%, dms., c.l., divd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., divd., 100% basis lb. .69½- —
tanks, divd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 2.00 - 2.20
Dimethyl phthalate, dms., c.l., works. lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Dimethyl sebacate, dms., c.l., works. lb. 1.275 - —
dms., l.c.l., divd lb. 1.285 - —
tanks, works lb. 1.25 - —
Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb .15 - —
Dimethyl sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
55-gal. ret. dms., l.c.l., works lb. .16 - —
10-gal. ret. dms., l.c.l., works lb. .16½- —
Dimethylamine, 25% soln dms., c.l., frt. equald, 100% basis lb. .42 - —
dms., l.c.l., frt. equald, 100% basis lb. .42½- —
Dimethylamine, tanks, frt. equald., 100% basis lb. .33 - —
Dimethylamine 40% soln. dms., c.l., frt. equald, 100% basis lb. .39 - —
Dimethylamine, 40% soln., dms., l.c.l., frt. equald, 100% basis lb. .39½- —
tanks, frt. equald, 100% basis. lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .32 - —
dms., l.c.l., frt. alld. lb. .33 - —
tanks, frt. alld lb. .30 - —
N,N-Dimethylformamide, dms., works lb. .34 .39
tanks, works lb. .32 —
2,4-Dinitroaniline, dms., frt. alld. lb. .68 - —
Dinitroaniline orange toner, CP bbls., divd. N of Tenn. and N. C., E. of Miss R., including Davenport, and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. 1.50 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89° C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, cry.stalliz-ing at 46½°C., dms., c.l., frt. alld E lb. .15¼- —
dms., l.c.l. frt. alld. E lb. .15¾- —
tanks, frt. alld E lb. .15 —

Eastman

PLASTICIZERS

dimethyl phthalate
diethyl phthalate
di-(methoxyethyl) phthalate
di-isobutyl phthalate
di-isobutyl adipate
dibutyl phthalate
di-isooctyl phthalate (DIOP)
dioctyl phthalate (DOP)
dioctyl adipate (DOA)
dioctyl azelate (DOZ)
dioctyl sebacate
dinonyl phthalate
plasticizer 84
—an octyl butyl phthalate
polymeric plasticizer NP-10
triacetin
tributyrin

For highest quality finished products, rely on Eastman plasticizers—made under the most exacting and rigid specifications in the industry. Samples and technical assistance furnished upon request. Also write for our booklet describing Eastman plasticizers and their uses.

Eastman CHEMICAL PRODUCTS, INC.,
Kingsport, Tennessee • subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; Houston; St. Louis.
West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

2,4-Dinitrochlorobenzene—Epichlorohydrin

2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E	lb.	.20¼-	—
dms., l.c.l., frt. alld. E	lb.	.20¾-	—
tanks, frt alld. E	lb.	.20 -	—
2,4-Dinitrophenol, bbls	lb.	.37 -	—
2,4-Dinitrotoluene, oily, dms.	lb.	.11 -	—
Refd., 63°C., dms	lb.	.23 -	—
Dioctyl adipate, dms., c.l., works.	lb.	.42½-	—
dms., l.c.l. works	lb.	.43½-	—
tanks, works	lb.	.40 -	—
Dioctyl phthalate, dms., c.l., frt. alld	lb.	.30½-	.31
dms., l.c.l., frt. alld	lb.	.31½-	.32
tanks, frt. alld	lb.	.28 -	.28½
Dioctyl sebacate, dms., c.l., works.	lb.	.60½-	—
dms., l.c.l., works	lb.	.61½-	.62½
tanks, works, dlvd	lb.	.58 -	.58½
1,4-Dioxane, dms., c.l., works	lb.	.28¾-	—
dms., l.c.l., works	lb.	.29¼-	—
tanks works	lb.	.27 -	—
Dipentaerythritol, bgs., l.c.l., dlvd. E	lb.	.35 -	—
Dipentene, dest.-dist., dms., c.l., works	gal.	.59 -	—
dms., l.c.l., works	gal.	.63 -	—
dms., l.c.l., ex whse	gal.	.77 -	—
Tankcars, works	gal.	.42 -	—
Dipentene steam- dist., dms., c.l., works, south	gal.	.59 -	—
dms., c.l., dlvd. New York	gal	.67 -	—
tanks, works, south	gal.	.45 -	—
Dip oil (see Tar acid oil)			
Diphenyl, bgs., c.l., t.l., works	lb.	.17¼-	—
bgs., l.c.l., works	lb.	.19 -	—
tanks, works	lb.	.16 -	—
Diphenyl oxide, perfume grade, cns.	lb.	.65 -	.85
Diphenyl phthalate, dms., c.l., works.	lb.	.51¾-	—
dms., l.c.l., works	lb.	.53¾-	—
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald	lb.	.33 -	—
bgs., l.c.l., same basis	lb.	.35 -	—
Refd., fused, tanks, same basis	lb.	.31 -	—
Tech., fused, tanks, same basis	lb.	.30 -	—
Diphenylguanidine, bgs., dms., ton lots, frt. alld	lb.	.54 -	—
bgs., smaller lots, frt. alld	lb.	.55 -	—
Diphenylhydantoin-sodium	USP, dms	lb. 5.00	5.60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17¾-	—
dms., l.c.l., frt. alld	lb.	.18¾-	—
tanks, frt. alld.	lb.	.15¼-	—
Dipropylene glycol methyl ether, dms., c.l. dlvd. E	lb.	.20 -	—
dms., l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.18½-	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.45 -	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.64 -	—
dms., smaller lots, frt. alld	lb.	.65 -	—
Divi-divi, 45% tannin, bgs., bls. c.l. US ports ex dock	ton.	76.00	Nom.
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald	lb.	.20 -	—
dms., l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.19 -	—
Divinylbenzene, 50-60%, dms., c.l., works, 100% basis	lb.	1.00 -	—
dms., l.c.l., works, 100% basis	lb.	1.05 -	—
Dodecylbenzene, dms., c.l., frt. alld	lb.	.14½-	—
tanks, same basis	lb.	.12½-	—
dms., l.c.l., same basis	lb.	.15½-	—

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb lots, dlvd:—

Blue, FD&C, No. 1	lb.	15.65	-17.60
No. 2	lb.	15.65	-17.60
Green FD&C, No. 1	lb.	15.65	-17.60
No. 2	lb.	19.60	-22.85
No. 3	lb.	21.30	-35.90
Red, FD&C, No. 1, cns	lb.	5.90	- 7.85
No. 2	lb.	3.30	- 4.10
No. 3	lb.	19.60	-22.85
No. 4	lb.	5.55	- 7.50
Violet, FD&C, No. 1, cns	lb.	15.65	-17.60
Yellow, FD&C, No. 1, cns	lb.	9.15	-11.05
No. 5	lb.	3.30	- 4.10
No. 6	lb.	3.30	- 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

Black, D&C, No. 1	lb.	10.50	-10.95
Brown, D&C, No. 1	lb.	15.65	-16.10
Green, D&C, No. 5	lb.	15.65	-16.10
No. 6	lb.	15.65	-16.10
No. 7	lb.	14.35	-14.80
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb.	5.25	- 5.70
Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	23.55	-24.00
No. 19	lb.	15.00	-15.45
No. 21	lb.	3.10	- 3.60
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.20	-24.65
No. 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No. 11	lb.	13.05	-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—

Blue, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Green, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Red, Ext., D&C, No. 1, cns	lb.	13.05	-13.50
Yellow, Ext., D&C, No. 1, cns	lb.	10.50	-10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract, dlvd. No.

20	Chrysoidine Y, dustless	lb.	.89	- —
27	Fast light orange 2G	lb.	1.29	- —
31	Phloxine 2G	lb.	1.05	- —
36	Yellow 2G	lb.	1.18	- —
40	Orange R extra, conc	lb.	1.52	- —
57	Fuchsine 6B	lb.	1.55	- —
79	Scarlet 2R	lb.	1.16	- —
151	Orange AD	lb.	.79	- —
161	Orange	lb.	.94	- —
176	Fast red A	lb.	1.39	- —
179	Rubine XX, conc	lb.	1.47	- —
180	Blue F4B	lb.	1.31	- —
185	Brilliant scarlet 3RN, conc.	lb.	1.20	- —
202	Chrome blue black R, conc.	lb.	1.07	- —
203	Chrome black T	lb.	1.03	- —
208	Fast blue SR	lb.	1.30	- —
216	Chrome red B	lb.	1.09	- —
234	Brown Y	lb.	1.27	- —
246	Blue black, extra, conc	lb.	1.37	- —
275	Milling red 3R, conc	lb.	1.91	- —
289	Navy blue 3R, conc	lb.	1.70	- —
299	Black F, conc	lb.	2.19	- —
304	Neutral black 2B, conc	lb.	2.61	- —
326	Fast scarlet 4BNC	lb.	2.12	- —
332	Bismark brown RX, conc., dustless	lb.	1.37	- —
365	Brilliant yellow conc	lb.	3.11	- —
382	Scarlet B	lb.	2.60	- —
401	Diazo black BHD	lb.	.93	- —
406	Blue 2B, extra conc	lb.	1.53	- —
419	Red FC	lb.	1.45	- —
420	Brown M	lb.	1.40	- —
448	Red 4BX conc	lb.	1.69	- —
518	Diamine sky blue FF, extra, conc	lb.	1.95	- —
561	Brown B	lb.	2.89	- —
581	Black EB, 200%	lb.	1.33	- —
593	Green BY, conc	lb.	1.02	- —
596	Yellow brown K, extra	lb.	1.26	- —
620	Yellow 2G	lb.	1.31	- —
639	Fast Yellow GG	lb.	2.32	- —
640	Yellow XX	lb.	2.30	- —
655	Yellow OX	lb.	2.64	- —
657	Malachite green V, crystals	lb.	2.73	- —
662	Brilliant green G	lb.	3.62	- —
667	Milling green 6B conc	lb.	4.78	- —
671	Blue EG	lb.	1.85	- —
681	Crystal violet powder	lb.	2.15	- —
698	Violet 6BN powder	lb.	2.25	- —
720	Brilliant blue BBG	lb.	2.44	- —
729	Blue B, extra conc	lb.	3.61	- —
749	Red BX	lb.	4.76	- —
800	Chinoline yellow ZSS	lb.	2.67	- —
814	Yellow NN, conc	lb.	3.67	- —
841	Safranine GF extra, conc	lb.	4.11	- —
860	Induline base ZM	lb.	1.07	- —
865	Nigrosine J	lb.	4.76	- —
922	Blue GXX	lb.	2.22	- —
978	Black GXCF conc	lb.	.38	- —
1034	Alizarin red SC	lb.	3.31	- —
1078	Alizarin syanine green base Z	lb.	6.13	- —
1085	Alizarin blue black B	lb.	3.02	- —
1096	Golden orange GFD, single paste	lb.	2.58	- —
1099	Dark blue BO, single paste,	lb.	2.28	- —
1101	Jade green N supra, double paste	lb.	1.55	- —
1106	Blue RS, double paste	lb.	3.85	- —
1113	Blue, BLFD, double paste	lb.	2.92	- —
1150	Olive R, Single paste, dms., dlvd.	lb.	1.42	- —
1151	Brown R, single paste	lb.	2.29	- —
1171	Indigo synthetic, 20% paste	lb.	.31	- —
1217	Orange RD, double powder,	lb.	4.60	- —
	p-4 Brown PG	lb.	3.00	- —
	p-14 Brown EB	lb.	2.16	- —
	p-24 Gray L	lb.	2.09	- —
	p-80 Diazo brilliant scarlet ROAD	lb.	3.62	- —
	p-202 Diazo black VJ, conc	lb.	2.48	- —
	p-244 Brilliant scarlet BN	lb.	1.70	- —
	p-313 Naphthol SWF	lb.	1.60	- —

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.

24	Oil orange Z-7078	lb.	1.06	- —
73	Oil scarlet BL	lb.	1.70	- —
1073	Oil violet ZIRS	lb.	6.81	- —
1078	Alizarin green, CG	lb.	3.53	- —
1080	Oil violet specia) Z	lb.	6.81	- —
	Oil black ZBC	lb.	4.46	- —
	Oil black ZBD	lb.	3.03	- —
	Oil black ZHH	lb.	4.61	- —
	Oil black ZMM	lb.	6.52	- —
	Oil blue ZN	lb.	8.02	- —
	Oil blue ZV	lb.	4.95	- —
	Oil orange ZMG	lb.	1.32	- —
	Oil red N-1700	lb.	1.76	- —
	Oil yellow ZG, conc	lb.	6.33	- —

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd. No.

p-517	Spirit yellow 2R, conc	lb.	4.62	- —
p-520	Spirit orange ZR, conc	lb.	5.87	- —
	Spirit black RB	lb.	2.95	- —
	Spirit brown ZG	lb.	5.30	- —
	Spirit red B, conc	lb.	6.41	- —

E

Echinacea root, bls	lb.	1.10	- —
Egg albumin (see Albumin).			
Egg yolk, dried, dom., bbls	lb.	1.35	- 1.37
Tanners, bbls.	lb.	.06	- .06½
Elm bark, grinding, bls	lb.	.30	- .32
Powd., bbls., bxs.	lb.	.45	- —
Select, bundles	lb.	.75	- —
	oz.	48.25	-49.00
Emetine hydrochloride, USP, bots	oz.	48.25	-49.00
Endrin, tech., dms., dlvd. 100% basis	lb.	3.75	- —
Eosine red toner, bbls., works	lb.	1.75	- —
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots	oz.	.98	- 1.00
hydrous bots., 100-oz lots	oz.	.92	- —
Ephedrine hydrochloride, NF, tins, 100-oz. lots	oz.	.62	- .72
Ephedrine sulfate, USP, cryst., tins, 100-oz. lots	oz.	.62	- .75
Powd., tins 100-oz. lots	oz.	.62	- .72
Epichlorohydrin, dms., c.l., dlvd	lb.	.35½-	—
dms., l.c.l., dlvd	lb.	.36½-	—
tanks, dlvd	lb.	.33 -	—

MONTROSE
CHEMICAL COMPANY

104-112 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Dichloro Vinyl Phosphate—D.D.V.P.

Dichloro Diphenyl Trichloroethane—D.D.T.

Diethyl Toluamide—D.E.T.

Ethyl Silicate 28%—40%

Mono Cresyl Diphenyl Phosphate

Tricresyl Phosphate—T.C.P.

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

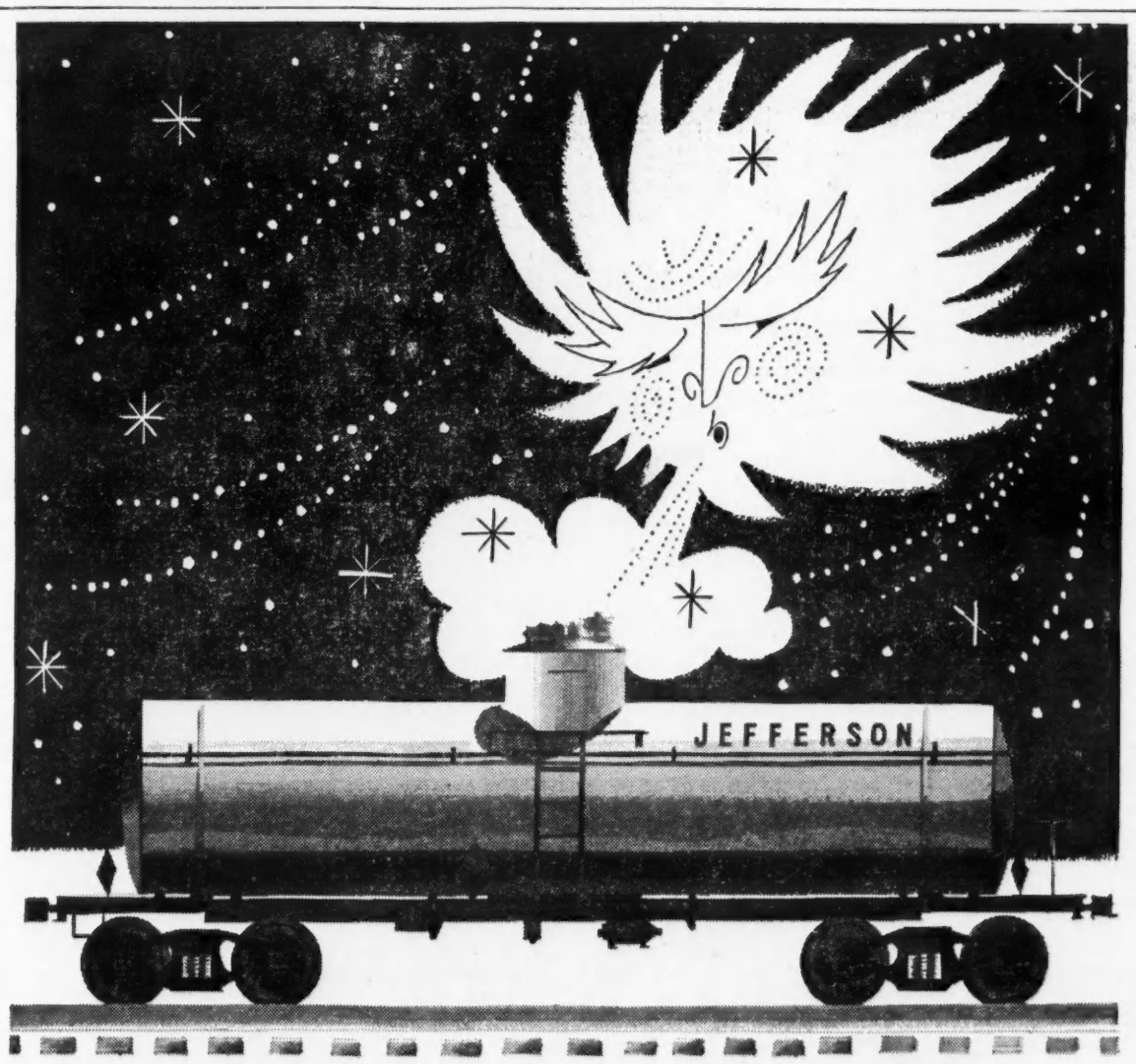
1-Epinephrine, base, syn., USP, bots., 100 gram lots gram .60 - —
Epsom salt (see Magnesium sulfate)
Erigeron oil, cns. lb. 6.00 - 7.50
Ergot, NF, dms., tin-lined lb. 1.60 - —
Eserine salicylate, bots oz. 72.50 - 84.00
Eserine sulfate, bots. oz. 87.75 —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis N. C., Ohio, St. Louis, St. Paul, Va. W. Va lb. .14½- .16
Ester gum, wood-rosin type, dms., c.l. same basis lb. .15 .16
Ether (see specific product)
Ethyl acetate, nat. ferment. 85-88%, dms., c.l., frt. alld lb. .15 - —
dms., t.c.l., dlvd lb. .16 - —
tanks, dlvd. lb. .12½- —
95-98%, dms., c.l., dlvd. lb. .15¼- —
dms., t.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12¾- —
99%, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13 - —
syn., 85-88%, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .12½- —
95-98%, dms., c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb. .16¼- —
tanks, dlvd lb. .12¾- —
99%, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13 - —
Ethyl acetoacetate, dms. c.l. dlvd. lb. .58½- —
dms., t.c.l., dlvd lb. .59½- —
tanks, dlvd lb. .56 - —
Ethyl acrylate, dms. c.l., t.l. dlvd. lb. .36 - —
dms., t.t.l., dlvd lb. .37 - —
tanks, dlvd lb. .34 - —
Ethyl alcohol, 190 pf., USP, tax paid, dms., c.l. dlvd E of Rockies, gal. 20.58 —
dms., t.c.l., same basis gal. 20.63 - 20.69
tanks, same basis gal. 20.42 —
tax-free, dms. c.l. dlvd. E of Rockies gal. .63 -
dms., t.c.l., same basis gal. .68 .74
tanks, same basis gal. 47 —
Ethyl alcohol, absolute, 200 pf. tax paid, dms. dlvd E of Rockies gal. 21.70 —
dms., t.c.l., same basis gal. 21.75 - 21.81
tanks, same basis gal. 21.54 —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate USP (see Benzocaine)
Ethyl amyl ketone, dms. c.l., dlvd. lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots lb. .90 - —
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E lb. .46 - —
dms., t.c.l., frt. alld E lb. .48 - —
tanks, frt. alld E lb. .43 - —
2-Ethyl butyl alcohol, dms., c.l., dlvd. works lb. .30 —
dms., t.c.l., works lb. .30¾- —
tanks, works lb. .28 —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., t.c.l., t.l.l., works lb. .36¾- —
tanks, works lb. .34 - —
Ethyl butyrate, works lb. .90 - 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 —
bgs., smaller lots works lb. .72 .80
Vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works. lb. .65 .70
bgs., smaller lots, works lb. .67 .81
Ethyl chloride, tech., cyls., works. lb. .20 .22
dms., works lb. .18 .20
tanks, works lb. 10 —
Ethyl cinnamate, cns. lb. 3.35 - 3.50
Ethyl ethanolamines, mixed, dms., c.l. dlvd. E lb. .43½- —
dms., t.c.l. dlvd. E. lb. .44½- —
tanks, dlvd. E. lb. .41½- —
Ethyl ether, absolute, ACS, dms. lb. .27 - —
Anesthesia, USP, hospitals, 1-lb. cns lb 1.01 - —
½-lb. cns. lb 1.09 - —
¼-lb. cns. lb 1.21 - —
Ethyl ether, indust., dms. c.l., dlvd. lb. .13 - —
dms., t.c.l., dlvd. E. lb. .14 - —
tanks, dlvd. E. lb. .10½- —
Ethyl gallate, dms. 100 to 2,000-lb. lots lb 3.90 4.40
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., t.c.l., t.t.l., dlvd. E lb. .38 - —
tanks, dlvd E lb. .34½- —
(2-Ethyl hexoic acid 1c. higher W. of Rockies.)
2-Ethylhexyl alcohol, dms. t.c. dlvd. lb. .24¼- —
dms., t.c.l., dlvd lb. .25¼- —
tanks, dlvd lb. .21¾- —
Ethyl iodide, cbys., works lb 3.30 —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 —
dms., t.t.l. frt. equald lb. .52½- —
tanks, frt. equald lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz. 11.85 —
Ethyl nitrite (see Nitrous ether)
Ethyl oenanthate, dms. lb. 1.20 - 1.50
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd lb. .44½- —
dms., t.c.l., dlvd. lb. .45½- —
tanks, dlvd lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —
N-Ethyl-o-toluidide, bbls. lb. .83 - —
Ethylamine (see Mono, Di- or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., t.c.l., frt. alld lb. .58 - —
tanks, frt. alld. lb .55 - —
Ethylbenzene, 99% dms. c.l. or t.l., frt. equald lb. .15 - —
dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 —
dms. t.c.l. works lb. .30¾- —
Ethylene, contract, ref'y gate lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., t.c.l. frt equald lb. .31½- —
tanks, frt equald lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., t.c.l. same basis lb. .12½- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.

Ethylene glycol, indust., dms., c.l., dlvd. E. lb. .16 - —
dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., t.c.l., dlvd. E lb. .23 - —
tanks, dlvd. E. lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E. lb. .22 - —
tanks, dlvd. E. lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l. dlvd. E lb. .19½- —
dms., t.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E. lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. 18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l. dlvd. E lb. .29 - —
dms., t.c.l., dlvd. E. lb. .29¾- —
tanks, dlvd. E. lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms. lb. .33 .35
Ethylene oxide, dms., c.l., dlvd E. lb. .21½- —
dms., t.c.l., dlvd. E. lb. .24½- —
tanks, dlvd. E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms. t.c.l., dlvd E., 100% basis. lb. .43 —
tanks, dlvd. E., 100% basis lb. .40 —
Ethylvanillin, 100-lb. fib. dms., 500-lb lots and over lb. 6.40 —
100-lb. fib. dms. smaller lots lb 6.65 6.95

Eucalyptol, USP, cns., dms. lb. 1.25 - 1.50
Eucalyptus oil, NF rectified, 70-80% dms lb. .70 - .80
NF, rectified, 80-90%, dms. lb. .88 - .95
Eugenol, USP, dms. lb. 2.05 - 2.20
Euphorbia herb, bls lb. .15 .17

F

F acid, crude, paste, bbls., works. lb 2.10 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton 19.50 - —
Feldspar in bags $3 per ton higher
Fennel oil, sweet, USP, cns. lb. 2.75 - 2.95
Fennel seed, Argentine, bgs. lb. .15 - —
French, light, bgs lb. .28 - —
Yugoslav, light, bgs lb. .31 - —
Rumanian, bgs. lb. .14 - —
Fenugreek seed, Indian, bgs. lb. .10½- —
Moroccan, bgs. lb. .10 - —
Ferric acetate, liq. 28°, bbls., c.l., works lb. .09 —
bbls., t.c.l. works lb. .09¾- —
8-oz., USP IX, cbys lb. .16 - —
USP IX, djns lb. .17 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms. t.c.l., works 100 lbs. 8.50 - —
Ferric chloride, anhyd., indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., t.c.l., works 100 lbs. 5.75 7.25
42° Be. photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
42° Be., sewage grade, tanks, frt. equald 100% basis. 100 lbs. 3.75 —
USP cryst, dms. works lb .07½- .09
Ferric citrate, gran., dms lb .86 —
Ferric hypophosphite, NF, dms lb 3.45 —
Ferric naphthenate, liq., 6% Fe, dms. frt alld lb. .25¾ —
Ferric oxalate, gran., dms lb. .89 - .91
Ferric oxides (see Iron oxides)
Ferric phosphate, NF, soluble, gran, pearls, cs lb. .64 - .67
Ferric pyrophosphate, NF VII, soluble, powd. gran., pearls, dms. 10,000-lb lots lb. .40½- —
Ferric resinate, 6¾% Fe., dms., ton lots frt alld lb .33 —
Ferric stearate, dms. c.l. frt alld. lb. .39 —
dms. t.c.l. frt alld lb 40 .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 —
bgs., t.c.l. works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .63 .68
Green, pearls, USP XII, gran., dms lb. .68 .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½



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Jefferson CHEMICAL COMPANY, INC.

Ferric-Potassium Oxalate—Grease Oil

Ferric-potassium oxalate, fine gran., dms	lb.	.32½-	.34½
Ferric-sodium oxalate, fine gran- dms	lb.	.27½-	.29½
Ferrous gluconate, USP, dms.	lb.	.76	—
Ferrous sulfate, gran. bgs., c.l., works	ton.	34.50	—
Ferrous sulfate, gran., bgs., l.c.l., dlvd. Metropolitan area.	100 lbs.	3.35	4.25
bbls., c.l., works	ton	40.00	—
bulk, c.l., works	ton.	27.00	—
USP cryst., bbls. dms	lb	09½	.10
Fir, balsam, Canada, bbls.	gal.	32.00	—
Oregon, bbls	gal.	4.00	4.10
Fir oil, Canada, cns	lb.	4.80	—
Fish oil, refd., alkali, dms	lb.	.1450-	.1500
Kettle-bodied, dms	lb.	.1680-	.1730
Light-pressed, dms	lb.	.1300-	.1350
tanks	lb.	.1150-	—
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units.		.14	—
200,000 A units per gram., dms. 1,000,000 units.		.15½-	—
500,000 A units per gram, dms., 1,000,000 units.		.16	—

Prices above are based on the USP XIV method of conversion. Morton Stubbs Corrected E x 1900.

Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area	ton.	126.00	-128.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Chesapeake Bay area	ton.	122.00	-124.00
Fleaseed (see Psyllium seed).			
Folic acid, USP, bots. fib. dms., kilo-lots or more	gram.	1.20	—
10% feed grade fib dms., 15 kilos or more	kilo.	86.00	—
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms., c.l., dlvd	lb.	.0715-	—
tanks, dlvd	lb	0450	—
Formaldehyde, 37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd	lb.	.0740-	—
tanks, dlvd	lb.	.0475-	—
Methanol-free (uninhibited), tanks, dlvd	lb.	.0420	—
Formic acid 85% cbys. c.l., works.	lb.	.1570-	—
cbys., l.c.l., works	lb.	.1620-	.1720
90%, chys., c.l., works	lb.	.1625-	—
chys., l.c.l., works	lb	.1675-	1775
Fringetree bark, bls	lb	.60	.61
Fuller's earth, bgs. c.l. ill mines,	ton.	19.00	—
insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines	ton.	17.50	—
calcined, bgs., c.l. same basis.	ton.	20.00	-21.75

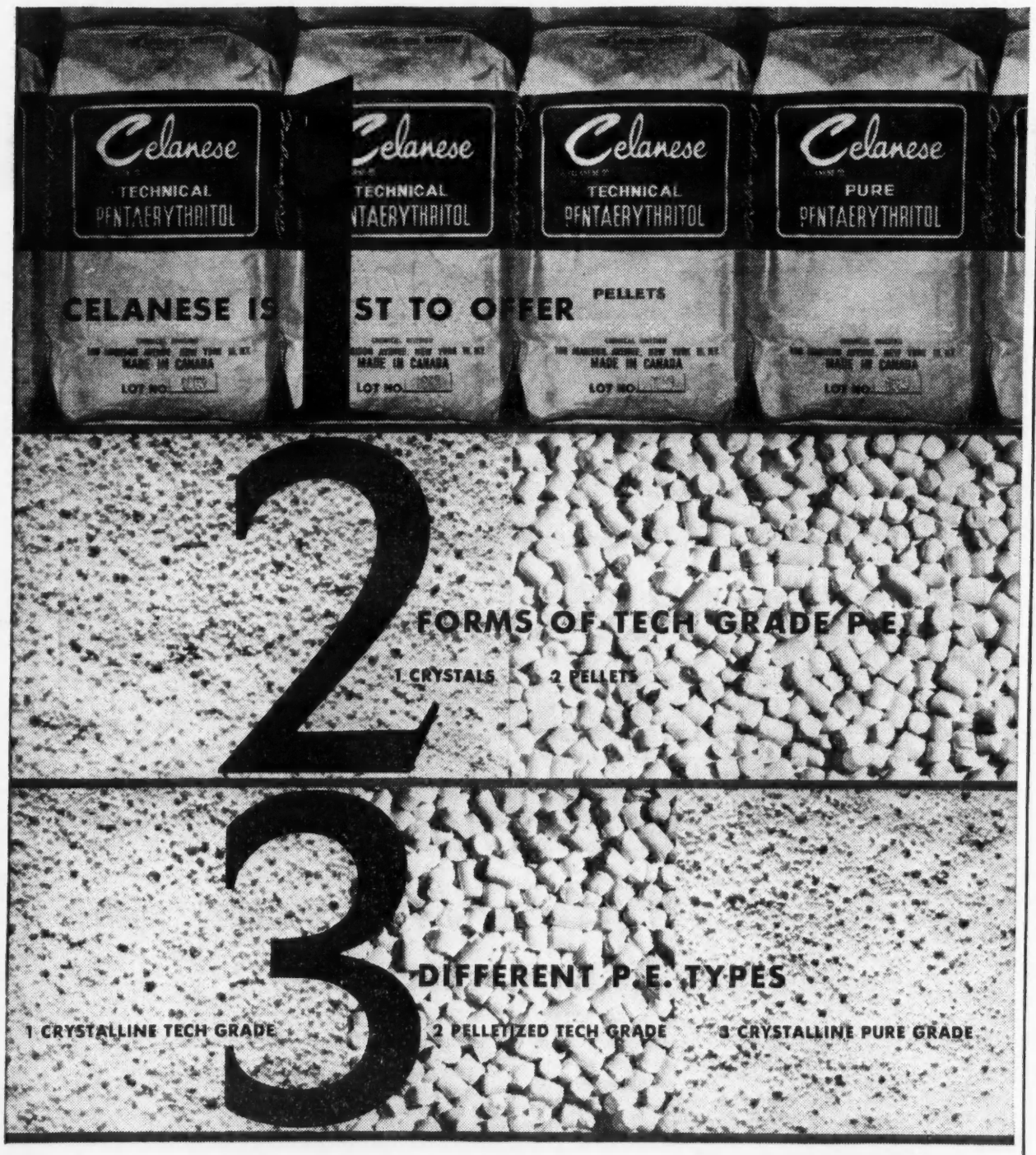
Fuller's earth, oil-bleaching grade, 100-mesh, bgs., c.l., same basis	ton.	16.30	-17.00
200-mesh, bgs., c.l., same basis.	ton	17.50	-18.00
Spent, bgs., c.l. ship. point	ton	4.50	5.00
Fumaric acid, tech. bgs. dms., c.l., frt. alld. E	lb.	.27¼-	—
bgs., l.c.l., same basis	lb.	.28¼-	—
Prices of fumaric acid 1½c. per lb higher west of Denver.			
Furfural, dms. c.l., works	lb.	.13	—
dms., l.c.l., works	lb.	.14	—
tanks, dlvd. E.	lb.	.12	—
tanks, dlvd. W	lb.	.13	—
Furfuryl alcohol, cns., works	lb	.29	—
dms., c.l., Memphis, Tenn	lb.	.20	—
dms., c.l., Newark, N. J	lb.	.21½-	—
dms., l.c.l., Memphis, Tenn	lb.	.21	—
dms., l.c.l., Newark, N. J	lb.	.22½-	—
tanks, Memphis, Tenn.	lb.	.184	—
Fusel oil, refd. dms., c.l., dlvd	lb.	.18	—
dms., l.c.l., dlvd.	lb.	.19	—
tanks, dlvd.	lb.	.15½-	—
Fustic extract, cryst. No 1, bbls., l.c.l	lb.	.47½-	—
No. 2, bbls. l.c.l	lb.	.45½-	—
No 3, bbls., l.c.l.	lb.	.43½-	—
Fustic extract, liq. No. 1, bbls., l.c.l	lb.	.22½-	—
No 2, bbls., l.c.l.	lb.	.21½-	—
No. 3, bbls., l.c.l.	lb.	.19	—
Solid, No. 1, bxs., l.c.l.	lb.	.45	—

G

G salt, bbls., frt. alld., 100% basis	lb.	.73	—
Gallic acid, NF VII, bbls., 1,000-lb. lots	lb	2.00	—
bbls., smaller lots	lb	2.02	2.22
Tech., bbls., 1,000-lb. lots	lb.	1.78	—
bbls., smaller lots	lb.	1.80	2.00
Gamma acid, dry grd., bbls., frt. alld	lb.	1.50	—
Paste, bbls., frt. alld.	lb.	1.45	—
Gammapicoline (see g-picoline).			
Garlic oil, domestic, bots.	oz.	5.55	6.05
imp., bots.	oz.	3.75	4.50
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible, pure (pork skin), 75 AOAC test, bbls., c.l.	lb.	.53	—
150 AOAC test, bbls., c.l.	lb.	.65	—
200 AOAC test, bbls., c.l.	lb.	.72	—
225 AOAC test, bbls., c.l.	lb.	.75	—
275 AOAC test, bbls., c.l.	lb.	.82	—
Gelsemium root, bls.	lb.	.26	—
Gentian root, bls.	lb.	.23	—
Grd., bbls., bxs.	lb.	.27	—
Powd. bbls. bxs.	lb	.27	—
Geraniol, extra, cns., dms.	lb.	2.85	3.15
Standard, cns., dms.	lb.	1.85	2.10
Geranium oil, Algerian, cns.	lb.	16.25	-17.00
Bourbon, cns.	lb.	16.25	-17.00
Geranium oil, Turkish (see Palmarosa oil).			
Geranyl acetate, cns.	lb.	2.55	2.85
Ginger oil, dist., bots.	lb.	16.50	-18.00
Ginger oleoresin NF from African root, bots	lb.	5.75	6.50
NF, from Jamaican root, bots	lb.	14.75	—
Ginger root, African, bls.	lb.	.21	.22
Cochin, bgs.	lb.	.16	—
Jamaican, No. 2, bgs.	lb	71	—
No. 3, bgs.	lb.	.69	—
Nigerian, split, bgs.	lb.	.21	—
Glauber's salt (see Sodium sulfate)			
Gluconic acid, tech., 50%, dms., frt. alld	lb.	.19½-	—
dms l.c.l., frt. alld.	lb.	.20½-	—
tanks, frt. alld.	lb.	.17	—
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd.	lb.	.15	—
104 jellygrams, bgs., c.l., same basis	lb.	.17	—
131 jellygrams, bgs., c.l., same basis	lb.	.18	—
191 jellygrams, bgs., c.l., same basis	lb.	.21	—
222 jellygrams, bgs., c.l., same basis	lb.	.22	—
Glue, bone, green, dry bone, 40 jellygrams, bgs., c.l., same basis	lb.	.13½-	—
65 jellygrams, bgs., c.l., same basis	lb.	.13¾-	—
86 jellygrams, bgs., c.l., same basis	lb.	.14	—
115 jellygrams, bgs., c.l., same basis	lb.	.15	—
135 jellygrams, bgs., c.l., same basis	lb.	.15	—
164 jellygrams, bgs., c.l., same basis	lb.	.16	—
180 jellygrams, bgs., c.l., same basis	lb.	.17	—
200 jellygrams, bgs., c.l., same basis	lb.	.18½-	—
Bone glue, l.c.l., prices 1c. higher.			
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd	lb.	.16	—
95-121 bgs., c.l., dlvd	lb.	.17	—
122-149, bgs., c.l., dlvd	lb.	.18½-	—
150-177, bgs., c.l., dlvd	lb.	.21	—
178-206, bgs., c.l., dlvd	lb.	.23½-	—
207-236, bgs., c.l., dlvd	lb.	.26	—
237-266, bgs., c.l., dlvd	lb.	.28	—
267-298, bgs., c.l., dlvd	lb.	.30	—
299-330, bgs., c.l., dlvd	lb.	.32	—
331-362, bgs., c.l., dlvd	lb.	.34	—
363-394, bgs., c.l., dlvd	lb.	.36	—
395-427 bgs., c.l., dlvd	lb.	.38	—
428-460, bgs., c.l., dlvd	lb.	.40	—
461-494, bgs., c.l., dlvd	lb.	.42	—
495-529, bgs., c.l., dlvd	lb.	.43	—
Hide glue, l.c.l., prices 2c. higher.			
1-Glutamic acid, 99½%, fib dms., 100-lb. lots, frt. alld	lb.	2.00	—
fib. dms., 25-lb. lots, frt. alld.	lb.	2.05	—
1-Glutamine, bots.	gram.	65	—
Glycerine, crude, nat., dom., saponification, 88%, dlvd. E., tanks.	lb.	.16½-	—
Soaplye, 80%, dlvd. E., tanks.	lb.	.15	—
Imp., nat., soaplye, 80%, c.i.f.	lb.	.13½-	.14
Glycerine, nat., refd., USP, CP, 99%, high gravity, dms., c.l., dlvd.	lb.	.29⅜-	—
dms., l.c.l., dlvd	lb.	.29⅜-	—
tanks, dlvd.	lb.	.27⅜-	—
96%, dms., c.l., dlvd	lb.	.28½-	—
dms., l.c.l., dlvd.	lb.	.29	—
tanks, dlvd.	lb.	.27	—
Glycerine, nat., refd., high gravity, dms., c.l., dlvd	lb.	.29¼-	—
dms., l.c.l., dlvd	lb.	.29¾-	—
tanks, dlvd	lb.	.27¾-	—
high gravity, yellow, dist., dms., c.l.	lb.	.28½-	—
dms., l.c.l., dlvd	lb.	.29	—
Glycerine, syn., dms., c.l., dlvd	lb.	.29½-	—
dms., l.c.l., dlvd	lb.	.30	—
tanks, dlvd	lb.	.28	—
Glycine (see Aminoacetic acid).			
Glycerol (see Glycerine).			
Glycolic acid (see Hydroxyacetic acid).			
Glyoxal, 30%, dms., c.l., works	lb.	.20½-	—
dms., l.c.l., works	lb.	.21¼-	—
tanks, works	lb.	.18	—
Golden seal root, NF, tested, bls.	lb.	4.10	—
Grapefruit oil, dms	lb.	1.60	1.90
Graphite, amorph., powd., bgs., fib. dms., ex whse	lb.	.06	.09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse	lb.	.19	.21½
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21	.24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.31½
Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Grease, white, choice, all hog, tanks, dlvd.	lb.	.08⅝-	—
Yellow, tanks, dlvd	lb.	.08	—
Grease oil, No. 1, dms., c.l.	lb.	.15¾-	—
dms., l.c.l.	lb.	.16¾-	.18¾
extra winter, strained, dms., c.l.	lb.	.18¼-	—
dms., l.c.l.	lb.	.19¼-	.21¼
prime, burning, dms., c.l.	lb.	.19¾-	—
dms., l.c.l.	lb.	.20¾-	.22¾

Green Pigments

Green pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.



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Celanese Corporation of America, Chemical Division, Dept. 556-L, 180 Madison Avenue, New York 16,

Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16.

Grindelia robusta herb, bls..... lb. .45 - —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., cbys., dms..... lb 2.30 - 2.40
Guaiacol carbonate, NF VII, dms.lb. 3.40 - 3.45
Guar gum, food grade, bgs., c.l.. lb. .40 - .45
l.c.l. ..... lb. .43 - .48
Tech. grade, bgs. ..... lb. .30 - .35
Guaiacwood oil, cns. ..... lb. 3.25 - 3.75

Gums

Gum quotations, formerly grouped under one heading, are now listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

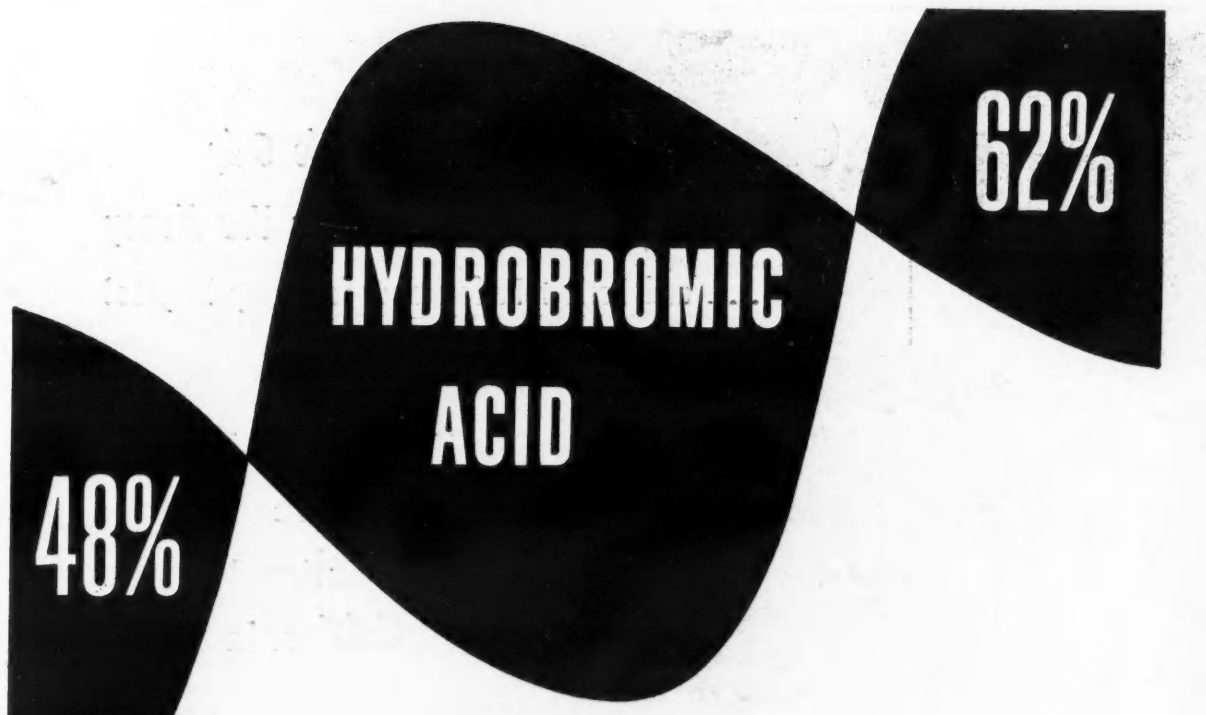
Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton.20.30 - —
Gypsum, terra alba, dom., 100-lb. paper bgs., trucks, same basis ton.20.00 - —
100-lb. paper bgs., trucks, works, New York ton.17.00 - —
imp., English, 100-lb. paper bgs., ex dock, New York ton.55.00 - —
100-lb. paper bgs., ex whse. ton.60.00 -62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l. same basis lb. 1.00 - —
Hansa yellow, 10 G, bbls., same basis as yellow, chrome.lb. 2.35 - —
Hansa G pigment, bbls ..... lb. 2.20 - —
Hawthorn berries, bgs ..... lb. .21 - —
Heliotropin, 100-lb. lots, dms....lb. 2.65 - 3.00
Hellebore root, dom. green bls lb. 70 .75
Helonias root, bls ..... lb. 1.75 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls. l.c.l ..... lb. .43 - —
No. 3, bbls., l.c.l ..... lb. .41 - —
No. 4, bbls., l.c.l..... lb. .39 - —
No. 5, bbls. l.c.l..... lb. .37 - —
Paste, No 1, bbls., l.c.l..... lb. .20½ —
Hemlock oil, cns ..... lb. 3.00 - 3.50
Henbane leaves, bls ..... lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal .20 - —
tanks, Baytown, Tex..... gal. .16¼- —
tanks, Borger, Tex..... gal. .16¼- —
Hesperidin, purif. 25 lb lots, f.o.b., works lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb.22.50 - —
bots., 5-lb lots, works ..... lb.23.00 - —
bots., 1-lb. lots, works..... lb.23.50 - —
Hexachlorophene, dms ..... lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis. lb. .243 - —
smaller lots, same basis ..lb. .253 - —
fib. dms. 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms. smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords N. J., dlvd. New York and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48½
Hexane, indust., tanks, Bayonne, N. J gal. .20 - —
tanks, Baytown, Tex..... gal. .17 - —
tanks, Borger, Tex..... gal. .17 - —
1-Hexanol, dms., c.l. works..... lb. .35 - —
dms., l.c.l., works ..... lb. .35¾- —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works ..... lb. .76 - —
Hexyl salicylate, dms..... lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd..... lb. .18½- —
tanks, dlvd ..... lb. .15 - —
Hexylresorcinol, USP dms., 50-lb. lots or more, dlvd lb.14.00 - —
dms., smaller lots, dlvd ..... lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 5.50 - —
Homatropine methylbromide, USP, bots. oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 5.75 - —
Horehound herb, bls ..... lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine hydrate 85% ret. dms., works lb. 1.35 - 1.55
100% ret. dms., works ..... lb. 1.60 - 1.80
Hydriodic acid, 1.50 s.g., cbys....lb. 2.92 - —
1.70 s.g., cbys ..... lb. 3.23 - —
Hydroabietyl alcohol, tecn., solid, zone 1 dms. c.l., dlvd .. lb. .29¼- —
dms., l.c.l., dlvd ..... lb. .29¾- .30¼
tanks dlvd ..... lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo. Idaho, Mont., Nev., N. M., Ore., Utah, Wash. Wyo. and the western part of Texas.
Hydrobromic acid medicinal, 48%, cbys., dlvd E lb. 37 - .43
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid 18° cbys., c.l., works 100 lbs. 2.50 - —
cbys. l.c.l. dlvd metropolitan area 100 lbs. 2.90 3.05
tanks, works frt. equald ton.28.00 - —
Hydrochloric acid, 20°, cbs., c.l., works 100 lbs. 2.75 - —
cbys. l.c.l. dlvd metropolitan area 100 lbs. 3.15 - —
tanks, works frt equald ton.30.00 - —
22°, cbys., c.l. works 100 lbs. 3.25 - —
cbys. l.c.l. dlvd metropolitan area 100 lbs. 3.65 - —
tanks, works frt equald ton.35.00 - —
Hydrochloric acid CP, USP consumers cbys extra c.l works lb 15¾- —
cbys. l.c.l. same basis lb 17¼- .17¾
Hydrochloric acid, CP, USP, consumers, 5-pint bots., extra cs., c.l., same basis lb. .20¾- —
5-pint bots extra cs., l.c.l., same basis lb. 22¼- .23¼
Hydrocortisone acetate bulk bots., 100 grams or more gram 4.50 - —
Hydrocortisone alcohol bulk bots., 100 grams or more gram 4.50 - —
Hydrocyanic acid cyls. c.l. dlvd. lb. .70 - —
cyls. l.c.l. same basis lb .75 - .90
Hydrocyanic acid dilute, NF, 2%, 5-lb bots lb .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal. dms. l.c.l. t.t.l., dlvd., 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms. l.c.l., t.t.l., dlvd. 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery
Hydrofluosilicic acid dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 .40
50-lb. cyls. l.c.l. works lb. .55 .60
Hydrogen chloride anhyd., 50-lb. cyls. l.c., works lb. .45 - —
Hydrogen cyanide liq. 98%, tanks, works lb. .16 - —
Hydrogen fluoride, anhyd., cyls., dlvd E lb. .30½- .32½
cyls., dlvd W ..... lb. .39 - —
tanks, works ..... lb. .21 - —
Hydrogen peroxide USP bbls. dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd ..... lb. .202 - —
dms., l.c.l., dlvd ..... lb. .211 - —
tanks, dlvd ..... lb. .1800- —
Hydroquinone photo grade, dms lb. 1.03 1.06
Tech., dms., c.l., dlvd..... lb. .82½- —
dms. l.c.l. dlvd ..... lb. .84½- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago. lb. .11 - —
tanks, Belle, W. Va..... lb. .073 - —
Hydroxycitronellal, cns..... lb. 4.95 - 5.30
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide bots.oz. 6.00 7.00
Hyoscyamine sulfate bots ... oz. 6.00 6.50
Hypernic extract, cryst. No. 1, bbls., l.c.l. lb. .52 - —
Liq., No. 1, bbls. l.c.l. ..... lb. .35 - —
No. 2, bbls. l.c.l lb. .27 - —
Hypophosphorous acid, purif., 50%, ton lots, f.o.b., works lb. .85 - —
NF, 30%, all quantities, same basis. lb. .75 - —

I

Ichthammol, NF, dms. jars lb. .75 .95
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indol, CP, bots. ..... lb.16.00 -18.25
Inositol, bots. dlvd ..... lb 5.00 —
dms., dlvd ..... lb 4.50 4.75
Insect flowers (see Pyrethrum).
Iodine, crude kgs lb 1.10 —
Resub. USP dms., jars lb. 2.30 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 —
Iodoform NF, dms. kgs .... lb 4.90 5.00
a-Ionone, cns ..... lb. 4.65 4.70
b-Ionone, cns ..... lb. 4.80 4.90
Ipecac root, bgs., whole..... lb. 9.00 —
Powd., bbls., bxs ..... lb.10.00 —
Irish moss bleached prime bls lb 28 .34
Iron blue, reg., bbls., c.l., dlvd E.lb. .52 - —
bbls., l.c.l. ton lots, same basis lb. .53 - —
bbls. smaller lots same basis lb .54 - —
Imp., British, bbls. c.l., same basis lb. .48 - —
bbls., l.c.l. ton lots, same basis. lb. .49 - —
bbls., smaller lots, same basis.lb. .50 - —
Iron blue, alkali-resisting, bbls., c.l., same basis lb .57 - —
bbls. l.c.l. ton lots same basis lb .58 - —
bbls. smaller lots same basis. lb .59 - —
Iron blue dlvd prices 1c higher for Pacific Coast states:—Wash., Ore. Cal., N. M. Ariz. Wyo. Utah Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide black pure bgs., c.l., works lb. .13¼ - —
bgs., l.c.l., works lb. .13½- —
Iron oxide brown pure bgs. c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide hydrated yellow, pure, bgs., c.l., works lb. .11½- —
bgs. l.c.l., works lb. .11¾- —
Iron oxide metallic brown, bgs., works lb. .04 - —



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HYDROBROMIC ACID

ASSAY:	48% TECHNICAL	62% TECHNICAL
Molecular Weight:	80.924	80.924
Specific Gravity at 20/4°C:	1.488	1.74
Pounds per gallon at 20°C:	12.4	14.5
HCl, not more than:	0.10%	0.15%
Vapor pressure at 30°C:		85 mm
at 50°C:		380 mm

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534 Bankson Street, Saint Louis, Michigan
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Iron oxide metallic red, bbls., c.l., works lb. .02½- —
bbls., l.c.l., works lb. .02¾- —
Iron oxide Persian Gulf red, bgs., c.l. works lb. .07¾- —
Iron oxide red, dom. pure, bgs., Bethlehem, Easton E. St. Louis, N. Y lb. .12¾- —
Iron oxide red, nat., 75-85% ferric oxide, bgs., l.c.l. Bethlehem, Pa., Copley O., Easton, Pa. bgs. c.l. works lb. .0675- —
bgs., l.c.l. works lb. .08 —
Iron oxide Spanish red, bbls., c.l. ex dock lb. .05¾- —
bbls. l.c.l. ex dock lb. .06 —
bbls., l.c.l., ex whse New York lb. .06½- —
Iron oxide yellow, nat. French type, bgs., c.l., works lb. .06 —
Peruvian type bgs. l.c.l lb. .0205- .0345
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol, cns lb. 1.60 - 1.80
Isobornyl acetate, cns lb. .54 - .60
Isobornyl formate, dms lb. 1.20 - —
Isobornyl proprionate, dms lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .75 1.00
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¾- —

Isobutyl alcohol, dms., c.l., dlvd. lb. .16 - —
dms., l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13½- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l. dlvd lb. .28½- —
Isobutyraldehyde, tech., dms., c.l., dlvd lb. .21½- —
dms., l.c.l., dlvd lb. .22½- —
tanks, dlvd lb. 19½- —
Isoeugenol, cns. lb. 3.80 - 4.00
Isoniazid, powd. bulk, 25-kilo lots or more kilo. 23.00 -25.50
bulk, smaller lots kilo. 24.00 -26.00
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 —
Isonicotinic acid hydrazide (see Isoniazid)
Iso-octyl alcohol, dms. c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd E lb. .24½- —
tanks, dlvd E lb. .21 —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l. works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isopropyl acetate, dms. c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis lb. .15 - —
tanks, same basis lb. .11½- —

Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .53 - —
dms., l.c.l., dlvd gal. .60 - —
tanks, dlvd gal. .37 - —
Refd., 95%, c.l., dms., dlvd gal. .55 - —
dms., l.c.l., dlvd gal. .62 - —
tanks, dlvd gal. .39 - —
Refd., 99%, dms., c.l., dlvd gal. .57 - —
dms., l.c.l., dlvd gal. .64 - —
tanks, dlvd gal. .41 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd. lb. .10½- —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) 70% in xylol, dms., c.l., t.l., works lb. .70 - —
dms., l.c.l., works lb. .714 - .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25
Itaconic acid, purif., fib. dms., c.l., works lb. .54 - —
fib. dms., l.c.l., works lb. .55 - —
Tech., fib. dms., c.l., works lb. .44 - —
fib. dms., l.c.l., works lb. .45 - —

J

J acid, paste, bbls., works, 100% basis lb. 2.45 - —
Powd., bbls., same basis lb. 2.50 - 2.85
Jalap root, NF, bls lb. .90 Nom.
powd. bbls., bxs lb. 1.15 Nom.
Japan wax, cs lb. .34 - .36

Juniper berries, bgs. lb. .15 - —
Juniper berry oil, bots lb. 2.90 - 3.10
Twice rectified, bots lb. 3.60 - 7.00
Juniper tar, NF, dms lb. .42 - .60
Juniper tar oil, NF (see Juniper tar).
Juniper wood oil, tech., cns lb. .38 - .58

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms lb. .10 - .12
colloidal, fib. dms lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bbls. lb. .45 - —
No. 2, powd., bbls lb. .35 - .38
No. 3, powd., bbls lb. .30 - .33
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs lb. .13 - —

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 150°-240° F. b.r., tanks, west coast, ex tax, Los Angeles gal. .174 - —
tanks, east coast, N. J., N. Y. gal. .20 - —
Benzene type, tanks, group 3 gal. .1550- —
Toluene type, tanks group 3 gal. .1432- —
Lactic acid, edible, 50%, bbls., dms., c.l., frt. equald lb. .1788- .2100
bbls., dms., 20 or more, frt. equald lb. .1838- .2150
bbls., dms., 5 to 19, frt. qeuald. lb. .1888- .2200
bbls., dms., 1 to 4, frt. qeuald. lb. .1938- .2250
80%, c.l., bbls., dms., frt. equald lb. .3038- .3600
bbls., dms., 20 or more, frt. equald lb. .3088 -.3650
bbls., dms., 5 to 19, frt. equald. lb. .3138- .3700
bbls., dms., 1 to 4, frt. equald. lb. .3188- .3750
Lactic acid, plastic grade, 50%, c.l., bbls., works lb. .2100- —
bbls., 20 or more, works lb. .2150- —
bbls., 5 to 19, works lb. .2200- —
bbls., 1 to 4 works lb. .2250- —
80%, bbls., c.l., works lb. .3600- —
bbls., 20 or more, works lb. .3650- —
bbls., 5 to 19, works lb. .3700- —
bbls., 1 to 4, works lb. .3750- —
Lactic acid, tech., 22%, bbls., c.l., works, 100 lbs. 6.30 - —
bbls., l.c.l., works 100 lbs. 6.70 - —
44%, bbls., c.l., works 100 lbs. 11.45 -11.95
bbls., l.c.l., works 100 lbs. 11.85 -12.35
USP, 85% cyls lb. .85 - .89
Lactose, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald. lb. .14½- —
bgs., 2,000-lb. lots, frt. equald. lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .06½- —
USP, fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
Lactose, USP, fib. dms., 200-1,800-lb. lots, frt. equald. lb. .22¾- —
USP lactose in bgs. ¼c. to 1c. lower.
Lady's slipper root, bls lb. 4.50 Nom.
Lake C red toner, alizarine, bbls., works lb. 1.20 - —
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., mds., works lb. .24 - .26
hydrous, dms., works lb. .23 - .25
Lard, cash, dms. lb. .1065- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .35 - —
Laurel leaf oil, dms., cns lb. 9.75 -12.50
Laurent's acid, bbls lb. .60 - —
Lauric acid, 90%, dms lb. .30½- .33
tanks lb. .28 - —
Lauryl alcohol, bots lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., l.t.l., works lb. .68 - —
Lavandin oil, cns., dms lb. 2.00 - 2.55
Lavender flowers, medium, bls. lb. .75 - .80
Ord., bls. lb. .25 - .40
Select, bls. lb. 1.10 - —
Lavender flower oil, USP, French, 35-37% ester, cns. lb. 3.50 - 5.00
38-40% ester, cns. lb. 7.50 - 8.50
40-42% ester, cns. lb. 8.75 - 9.50
Spike, Spanish, cns lb. 2.05 - —
Lead acetate, NF, cryst., gran., powd lb. .34½- —
White, cryst., bbls lb. .25½- —
gran., bbls. lb. .26¼- —
powd., bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
3-lb. bgs. or larger, l.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l. lb. .41½- —
1-lb. bgs., l.c.l. lb. .42½- —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼- —
bbls., l.c.l., same basis lb. .18¼- —
Lead carbonate (see Lead, white, basic cabonate).
Lead chloride, dms lb. .45 - —
Lead iodide, NF V. jars lb. 3.82 - —
Lead linoleate, fused, 26% Pb, dms. lb. .33 - —
Lead metal, prime, pigs., New York. lb. .13 - —
St. Louis lb. .1280- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .20 - —
bgs., l.c.l., same basis lb. .2075- —
Lead naphthenate, liq., 16% Pb, dms., dlvd. lb. .17 - —
24% Pb, dms., dlvd lb. .21 - —
Solid, 37% Pb, dms. dlvd lb. .27½- —
Lead nitrate, bbls lb. .26¾- —
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech., powd., bbls. lb. .45 - .50
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. alld. lb. .15¼- —
bbls., l.c.l., same basis lb. .16¼- —
97% Pb_3O_4, bbls., c.l., same basis. lb. .1545- —
bbls., l.c.l., same basis lb. .1645- —
98% Pb_3O_4, bbls., c.l., same basis. lb. .1560- —
bbls., l.c.l., same basis lb. .1660- —
Lead resinate, precip. 23% Pb, dms., ton lots, dlvd. lb. .33 - —

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

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Unadulterated
California
LEMON OIL
U.S.P.

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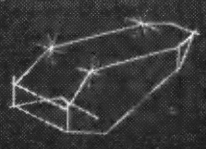
the Lactose  best suited for

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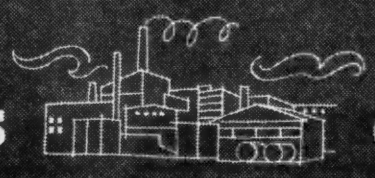
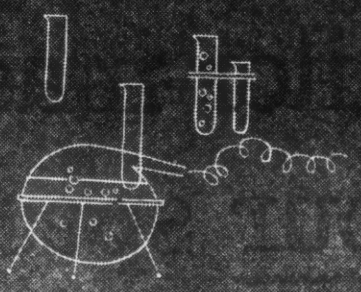
Company's  complete line

of milk sugars. 

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and their West Coast Branch, **MEFFORD CHEMICAL COMPANY**

Lead Salicylate—Manganese Dioxide

Lead salicylate normal dms. works	lb.	.46	—
Lead silicate, (see Lead white basic silicate).			
Lead sulfate (see Lead, blue basic sulfate)			
Lead tallate liq. 16% Pb dms	lb.	.15	—
24% Pb dms	lb.	.18½	—
Solid 30% Pb dms	lb	.23¼	—
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld	lb.	.17½	—
bgs., l.c.l., same basis	lb.	.18½	—
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld	lb.	.16	—
bgs., l.c.l., same basis	lb.	.17	—
Lead white basic sulfate, bgs., c.l., shipt pt. frt. alld	lb.	.17¼	—
bgs. l.c.l. same basis	lb.	.18¼	—
Lecithin edible, tech. bleached, non-ret. dms. c.l., works.	lb.	.14	.15
non-ret. dms. l.c.l., same basis	lb.	.16	.17
Edible tech. unbleached, non-ret. dms., c.l., same basis	lb.	.13	.14
non-ret. dms. l.c.l., same basis	lb.	.15	.16
Lemon bioflavonoid complex, fib. dms. 25-lb lots, works	lb	9.00	—
Lemon oil, terpeneless, bots.	lb.	22.00	-30.00
USP, Calif., cns., dms	lb.	3.00	- 4.00
Messina, cns.	lb.	4.50	- 6.00
Lemongrass oil, cns., dms	lb.	1.15	- 1.35
dl-Leucine, dms., works	lb.	12.25	-15.00
Licorice root, gran., bls.	lb.	.15	- .17
Powd., bls.	lb.	.12	- .15
Whole, bls.	lb.	.10	- .12
Lignaloe wood oil, Mexican, cns	lb.	3.75	- 5.50
Lignosulfonate 70% tannin, bgs., c.l., works	lb.	.06½	—
bgs. l.c.l., works	lb.	.06¾	—
Lime, chemical (quicklime), bulk, c.l., 30,000 tons Metropolitan New York destination, freight equalized with nearest producing pt	ton.	22.13	—
Hydrated, bulk,, c.l., same basis	ton.	23.63	—
Spray, bgs., c.l., same basis	ton.	27.63	—
Lime oil, dist., Mexican, cns	lb.	6.10	- 7.50
West Indian, cns	lb.	6.10	- 7.50
Expressed, West Indian, cns	lb.	8.50	-11.00
Terpeneless, dist., bots	lb.	68.00	—
expressed	lb.	82.00	-90.00
Lime salts (see Calcium).			
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite)			
Limestone grd., bgs., works	ton.	3.50	4.00
Linalool ex bois de rose oil, dms.	lb.	4.75	- 5.35
Ex linaloe wood oil, dms	lb.	5.30	- 7.10
Synthetic, dms., works	lb.	5.50	—
Linalyl acetate, ex bois de rose, 90-92%, dms	lb.	4.75	- 5.35
96-98%, dms.	lb.	5.25	- 6.60
Ex petitgrain, bots.	lb.	4.80	5.90
Synthetic, dms., works	lb.	5.50	—
Lindane, 25% formulation, dealers, dms., frt. alld	lb.	1.58	- 1.68
Lindane, 99%, tech., formulators, dms., frt. alld	lb.	2.65	- 3.25
Linden flowers, with leaves, bls	lb.	.25	—
Without leaves, bls	lb.	.30	—
Linseed meal, expeller, 32% bulk, Minneapolis mills	ton.	50.50	—
Extracted, 34% bulk, same basis.	ton.	44.00	-44.50
Linseed oil, raw, dms., c.l., New York	lb.	.1840	—
dms., l.c.l., New York	lb.	.1940	—
tanks, f.o.b. Minneapolis	lb.	.1480	—
tanks, New York	lb.	.1630	—
tankwagon, New York	lb.	.1670	.1690
Boiled linseed oil, .006c. per lb. higher.			
Linseed oil acids, dist., dms	lb.	.2140	—
Water-white, dms.	lb.	.2440	—
Linseed pitch, dms	lb.	.06	.06¾
Litharge, coml., powd., bbls., c.l., works, frt. equald	lb.	.14¾	—
bbls., l.c.l., same basis	lb.	.15¾	—
Lithium benzoate dms.	lb.	1.65	- 1.67
Lithium bromide, NF, dms., works, frt. equald	lb.	2.60	—
Lithium carbonate, NF, dms., c.l., t.l., dlvd	lb.	1.29½	—
dms. ton lots to t.l. dlvd	lb.	1.30	1.30½
Tech., dms., c.l., t.l., frt. alld	lb.	.73	—
dms., ton lots, same basis	lb.	.79	—
dms., smaller lots, same basis.	lb.	.86	—
Lithium chloride, CP, anhyd., ton lots	lb.	1.23½	—
Lithium chloride, tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld	lb.	.90	- .95
dms., l.c.l., same basis	lb.	1.00	- 1.06
Lithium citrate, NF, dms., ton lots.	lb.	1.50	—
Lithium fluoride, bbls., 10,000-lb. lots, dlvd	lb.	2.17½	—
bbls. ton lots, dlvd.	lb.	2.18½	—
bbls., less ton lots, dlvd.	lb.	2.23½	—
Lithium hydride, powd., dms., 500-lots, works	lb.	10.50	-12.50
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld	lb.	.75	—
dms., l.c.l., frt. alld	lb.	.76	—
Lithium manganite, dms., works	lb.	.95	1.15
Lithium nitrate, tech., dms., 100-lb. lots	lb.	1.25	—
Lithium salicylate, dms	lb.	1.60	1.70
Lithium silicate, dms., works	lb.	1.10	1.30
Lithium stearate, dms., c.l., works.	lb.	.47½	—
dms., ton lots, works	lb.	.48½	—
dms., less-ton lots, works	lb.	.53½	—
Lithium sulfate, dms., 100-lb. lots.	lb.	1.05	—
Lithium titanate, dms., works	lb.	1.15	1.35
Lithol red toner, bbls., works	lb.	.93	—
Lithol-rubine red toner, pure bbls., works	lb.	1.50	—
Resinated, bbls., works	lb.	1.40	—
Lithopone, ord. bgs. c.l. dlvd E.	lb.	.08½	—
bgs., l.c.l., dlvd E	lb.	.09½	—
Titanated (high-strength), bgs., c.l., dlvd	lb.	.11	—
bgs. l.c.l. dlvd	lb.	.12	—
Lobelia herb, bls.	lb.	.50	- .65
Loheline sulfate, bots., works	oz.	37.50	-38.50
Locust bean gum, powd., bgs.	lb.	.38	- .39
Logwood extract, cryst. No. 1, bbls., l.c.l.	lb.	.41	—
No. 2 bbls., l.c.l.	lb.	.39	—
Liq. No. 1, bbls., l.c.l.	lb.	.20	—
No. 2, bbls. l.c.l.	lb.	.19	—
No. 3, bbls., l.c.l.	lb.	.18½	—
Solid No. 1 boxes, c.l.	lb	.35	—
Lycopodium, cs.	lb.	5.50	—
dl-Lysine monohydrochloride, fib dms	lb	12.00	—
l-Lysine monohydrochloride, fib dms., 25-50 lbs.	lb.	12.00	—

M

Mace, Siauw, bls	lb.	2.50	—
West Indian No. 1, bls., shipment	lb.	2.40	—
Mace oil, dist., cns., dms.	lb.	13.50	-15.00
Magnesia calcined tech. bgs., ctns., frt. equald	lb.	.25¾	26½
Tech. syn. rubber grade, light, bgs. c.l. frt equald	lb.	.29¾	30½
rubber grade extra light, bgs., c.l. frt. equald	lb.	.29¾	—
bgs. l.c.l. frt. equald.	lb.	.30½	—
USP, light bgs	lb.	.36½	.37½
heavy fib dms.	lb.	.45	.52
Magnesite, chemical grade, calcined, powd., bgs. c.l., works, frt equald	ton.	82.50	—
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chawelah, Wash	ton.	46.00	—
Magnesium bromide cs. jars	lb	.95	1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald	lb.	.10½	—
bgs. t.l. frt. equald	lb.	.11	—
bgs., l.c.l. frt. equald	lb.	.12½	.13½
USP, bgs., c.l., frt. equald	lb.	.13	—
bgs. t.l., frt. equald	lb	.13½	—
bgs. l.c.l. frt. equald	lb	.14½	15½
Above prices are quoted f.o.b. works, freight equald, with metropolitan New York and competitive producing points.			
Magnesium chloride, anhyd., 92% flake or pebble dms., c.l., works	lb.	.12¾	—
dms. l.c.l. works	lb.	.14	.15
Hydrous, 99% flake bgs., c.l., works	ton.	55.00	—
bgs., l.c.l., works	ton.	65.00	-80.00
Magnesium gluconate, dms.	lb.	1.42	—
Magnesium hydroxide NF, powd., bbls. dms. kgs	lb.	.23½	.27
Magnesium metal, 99.8% ingots, 10,000-lb. lots or more, works	lb.	.36	—
Pigs, 10,000-lb. lots or more, works	lb.	.35¼	—
Sticks, cs, works, frt., alld. on carlots	lb.	.59	—
Magnesium nitrate, cryst., dms., works	lb.	29	—
Magnesium oxide (see Magnesia, calcined).			
Magnesium peroxide, 15%, dms., works	lb.	1.00	1.05
Magnesium phosphate tribasic, NF, bbls	lb.	.75	—
Magnesium silicate (see Talc).			
Magnesium silicofluoride, dms., works	lb.	.10½	.12
Magnesium sulfate tech., bgs., c.l., works	100 lbs.	2.15	—
bgs. l.c.l. works	100 lbs.	2.90	3.15
Magnesium sulfate, USP, cryst., bgs., c.l., works	100 lbs.	2.35	—
bgs., l.c.l., 5,000 lbs., 1 withdrawal	100 lbs.	3.10	—
bgs., smaller lots	100 lbs.	3.35	—
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots	lb.	.38	—
fib. dms. 1,000-lb lots	lb.	.40	—
fib. dms. 100-lb lots	lb.	.45	—
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.			
Malachite green, straight, PTMA, bbls., works	lb.	5.30	—
Malathion, dms., c.l., works	lb.	.90	—
dms., l.c.l., works	lb.	.92	1.02
Maleic acid, cryst., powd., dms.	lb.	.37¼	—
Maleic anhydride, dms., c.l., dlvd. E. of Rockies	lb.	.28¾	—
dms., l.c.l., dlvd. E. of Rockies	lb.	.29¾	—
tanks, dlvd. E. of Rockies	lb.	.27¾	—
Prices on maleic anhydride W. of Rockies, 1½c. per lb higher.			
Malic acid, tech., dms	lb.	.50	—
Mandelic acid NF, dms., 1,000-lb. lots.	lb.	2.35	—
dms., smaller lots	lb.	2.40	2.50
Mandrake root, bls.	lb.	.50	.52
Manganese acetate, bbls., dlvd.	lb.	.35	—
Manganese arsenate, bgs.	lb.	.16	—
Manganese borate, tech., fib. dms.	lb.	.23½	—
Manganese carbonate, bbls., works.	lb.	.22	—
Manganese chloride, anhyd., dms., works	lb.	.25½	—
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works	ton.	148.00	—
40,000 to 99,999-lb lots, paper bgs., same basis	ton.	144.50	—
40,000 to 99,999-lb. lots, dms., same basis	ton.	152.50	—
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.			

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CALIFORNIA COLD-PRESSED

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Inquiries from countries other than the U.S. and Canada should be directed to the Products Dept., Sunkist Growers.

Manganese hydrate, bbls., dlvd.. lb. .36 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .32½- —
Solid, precip., 8.2% Mn, bbls lb. .37½- —
Manganese metal, electrolytic, dms., c.l., dlvd. E..... lb. .34 - —
dms., ton lots, dlvd. E..... lb. .36 - —
dms., smaller lots, dlvd. E lb. .38 - —
Manganese naphthenate, liq., 6% Mn. dms., frt. alld lb. .27 - —
Manganese resinate, fused, 3½% Mn. dms lb. .24 - —
Precip., 6½-7% Mn, dms lb. .30 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S. E ton.97.50 - —
bgs., l.c.l., dlvd S.E ton.104.50 - —
Manganese tallate, 6% dms..... lb. .24 - —
Manganous gluconate, dms. ..... lb. 1.84 - —
Mangrove bark, E. African, 38% tannin, bgs. c.l. ex dock ton.64.00 -65.00
South American, 30% tannin, bgs., c.l., ex dock ton.52.00 -53.00
Manila copal gum, C, bgs..... lb. .34 - .38
CBB, bgs. ..... lb. No stocks.
DBB, bgs. ..... lb. .24 - .27
DK, bgs. ..... lb. No stocks.
DK, dust, bgs..... lb. .14 Nom.
MA, soft, bgs. ..... lb. .18½- .22
WS, bgs. ..... lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 —
fib. dms., to ton lots, works lb. .62 —
fib. dms., single dm., works lb. .63 —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
bgs., l.c.l., works lb. .31 - —
Menadione, USP bots gram. .044 .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .08¾- .09
Menthol, Nat., USP, Brazilian, cs lb. 6.25 - 6.50
Syn., USP racemic cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs., fib. dms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
NF, gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib. dms lb. 6.84 - —
Mercuric iodide, red, NF X, fib. dms. lb. 7.72 - —
Mercuric oxide, red, NF X, powd., fib. dms lb. 5.97 - 6.01
Tech., c.l., works, tech. ..... lb. 5.77 - —
NF X, fib. dms ..... lb. 6.14 - —
Mercuric oxide yellow, bbls., tech., 1,000-lb. lots lb. 5.58 - —
bbls., smaller lots ..... lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lb. per flask, net-flask.225.00-230.00
Mesityl oxide, dms., c.l., dlvd... lb. .15 - —
dms., l.c.l., dlvd. ..... lb. .16 - —
tanks, dlvd. ..... lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2.4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works lb. .47 - —
dms., smaller lots, works lb. .47½- .50
tanks, works lb. .45 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min., frt. alld or dlvd. gal. .48½- —
dms., l.c.l., works gal. .55½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35½- —
tankwagon, 4,000 gal., min., frt. alld. or dlvd gal. .32½- —
tankwagon, 4,000 gal. min., works, Carteret, Camden, N. J gal. .29½- —
Syn., Zone 2, dms., c.l. or t.l., min. frt. alld. or dlvd. gal. .51½- —
dms., l.c.l. works gal. .58½- —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. metropolitan areas gal. .38½- —
tanks, 4,000 gal. min., frt. alld. or dlvd. gal. .35½- —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah, Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 2.45 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½- —
non-ret. dms., l.c.l., same basis lb. .21 - —
Methyl abietate, hydrogenated non-ret. dms., c.l., dlvd., zone 1 lb. .21 - —
non-ret. dms., l.c.l., same basis lb. .21½- —

Zone 1 includes New England and Middle Atlantic states. Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala. Ga.; Fla., S. C. and Tenn.

Methyl acetone, nat., dms., t.c.l., E. of Miss., frt. alld gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld. E gal. .66 - —
dms., t.c.l., frt. alld. E..... gal. .72 - —
tanks, frt. alld. E ..... gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. ..... lb. .40 - —
tanks, dlvd. ..... lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., dlvd E..... lb. .18 - —
tanks, dlvd E ..... lb. .14½- —
Methylamyl alcohol (see Methyl isobutyl carbinol).
Methylamyl ketone, dms., works lb. 1.05 - —
Methyl anthranilate, cns. ..... lb. 2.35 - 2.65
Methyl benzoate, cns., dms..... lb. .65 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .65
Methyl cellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.), 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis .... lb. .76 - —
50-lb. bgs. smaller lots, frt. alld. on 100-lbs lb. .79 - .89
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd lb. other consumers or service men, cyls., dlvd lb. .46¾- .67¾- —
Methyl chloroform (see 1,1,1-trichloroethane).
Methyl cinnamate ..... lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd..... lb. .16 - —
tanks, dlvd..... lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Methyl formate, refd., dms ..... lb. .35 - .40
Tech., non-ret. dms., any quantity works lb. .10 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works.. lb. .21 - —
t.l., min. 23,000 lbs., works.. lb. .21½- —
l.t.l., works ..... lb. .23 - —
Methyl heptin carbonate, bots..lb.28.00 -31.00
Methyl p-hydroxybenzoate fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns.. dms. lb. 4.85 - —
Methyl isobutyl carbinol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd ..... lb. .18 - —
tanks, dlvd ..... lb. .14½- —
Methyl isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd..... lb. .18 - —
tanks, dlvd..... lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald. with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis ..... lb. .29 - —
Methyl naphthyl ketone, cryst., cns.. lb. 3.00 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion, tech. 80%, dms., c.l., frt. alld.. lb. 1.40 - —
l.c.l., frt. alld. ..... lb. 1.45 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb fib dms lb. 6.90 —
Methyl salicylate USP cns., 500-lb. lots lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. .68 —
Methyl violet toner, molybdated, PMA, bbls. dlvd N of Tenn and N. C., E of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.80 - —
Methyl violet toner, tungstated, PTMA, bbls., same basis lb. 4.35 - —

Methyl violet toner dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Methylene chloride, tech., dms., straight or assorted, c.l. or t.l., works lb. .14 - —
l.c.l., t.t.l., works lb. .16¾- —
tanks, 4,000-gal. min., tank trucks, maximum load limit, works lb. .12½- —
tanktrucks, 1,000-gal. min., works lb. .13½- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —

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Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
bgs. t.c.l. ex-whse lb. 07¼- —
Mica, wet-grd., paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb. .08¼- —
bgs. t.c.l. ex-whse or frt. alld. E lb. .09 - —
rubber, bgs., c.l. works, frt. alld. E lb. .08 - —
bgs. t.c.l. ex-whse. or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- —
bgs. ex-whse or frt. alld E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
white, 5-10 microns, bgs., t.c.l., ex-whse., or frt. alld. E.lb. .09 - —
Mica, wet-grd. W. of Miss ½c higher; W of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0675
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., t.c.l., same basis gal. .67 - —
tankcars, refy. gal. .46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
non-ret. dms. t.c.l., same basis gal. .67 - —
tankcars, refy. gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., t.c.l., same basis gal. .68 - —
tankcars, refy gal. .47 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .69 - —
non-ret. dms., t.c.l., same basis gal. .74 - —
tankcars, refy gal. .53 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .75 - —
non-ret. dms., t.c.l., same basis gal. .80 - —
tankcars, refy gal. .59 - —
180-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.c.l., same basis gal. .82 - —
tankcars, refy gal. .61 - —
200-210 vis., non-ret. dms., c.l., f.o.b., New York gal. .84 - —
non-ret. dms., t.c.l., same basis gal. .89 - —
tankcars, refy gal. .63 - —
Mineral oil, white, tech., 300-350 vis., non-ret., dms., c.l., f.o.b., New York gal. .84½- —
non-ret. dms., t.c.l., same basis gal. .89½- —
tankcars, refy gal. .68½- —
Mineral orange, American, bbls., t.c.l., works lb. .1860- —
Mineral spirits, petroleum, odorless, tanks, refy., Watson, Calif. gal. .25 - —
tanks, Borger, Tex gal. .25 - —
Houston, Tex gal. .25 - —
Philadelphia gal. .32 - —
Newark gal. .29 - —
New York, dlvd gal. .30½- —
Wood River, Ill gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco gal. .169 - —
tanks, east coast New Jersey, New York gal. .18 - —
tanks, group 3 gal. .12875- —
tankwagon Boston gal. .20 - —
Buffalo gal. .20½- —
Chicago gal. .289 - —
Cleveland gal. .23½- —
Newark gal. .19 - —
tankwagon, New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Providence gal. .20½- —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Ordeans gal. .12 - .12½
tanks, New York gal. .18 - —

Molybdated orange, bbls. lb. .48 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, pure, dms., works lb. 1.15 - —
Tech., dms., works, basis Mo content lb. 1.39 - —
Molybdic acid, 85%, dms., works lb. 1.20 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., t.c.l., same basis lb. .58½- —
tanks, same basis lb. .55 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., t.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., t.c.l., same basis lb. .28½- —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous solution, 100% basis, dms., c.l., dlvd. E lb. .38½- —
dms., t.c.l., dlvd. E lb. .40 - —
tanks, dlvd. E lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., t.c.l., same basis lb. .28½- —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., t.c.l., same basis lb. .34½- —
tanks, same basis lb. .31 - —
Monomethylamine, 30 35% soln., dms., c.l., frt equald, 100% basis lb. .40 - —
dms., t.c.l., frt equald, 100% basis lb. .40½- —
tanks, frt. equald 100% basis. lb. .31 - —
Monomethylamine, 40% soln., dms., frt. equald., 100% basis lb. .37 - —
dms., t.c.l., frt equald, 100% basis lb. .37½- —
tanks, frt. equald. 100% basis. lb. .31 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms., 100-lb lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., c.l. lb. 1.12 - —
dms., t.c.l. lb. 1.15 - —
Monosodium phosphate, (see Sodium phosphate, monobasic)
Montan wax, dom. refd. bgs lb. .29 .30
imp., crude, Bohemian, bgs. lb. .23 - .24
German, bgs. lb. .27 - .28
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine, cns oz. 12.40 -12.60
Morphine acetate, anhyd., cns oz. 9.95 -10.00
Morphine hydrobromide, cns oz. 9.90 9.95
Morphine hydrochloride, NF, cns. oz. 9.90 9.95
Morphine sulfate, USP cns oz 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., t.c.l., dlvd E lb. .56¼- —
tanks, dlvd E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb lots lb 4.45 5.15
cns., 25-lb. lots lb. 5.05 - 5.65
cns., 5-lb lots lb 5.20 5.50
Ketone, fib dms., 100-lb. lots lb 4.70 5.30
cns., 25-lb lots lb 5.35 - —
cns., 5-lb lots lb 5.45 - —
xylol, fib. dms., 100-lb. lots lb. 1.40 - —
cns., 25-lb lots lb 1.45 - —
cns., 5-lb lots lb. 1.50 - —
Mustard seed, Danish, yellow, bgs. lb. .10¼- —
Dutch, bgs lb. .10½- —
Montana, Oriental, bgs. lb. .09¾- .10
Montana, bgs., No 1 lb. .09½- —
Mustard oil, syn. bots lb. 1.60 - 1.85
coast, Los Angeles gal. .174 - —
Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash. gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 gal. .13875- —
Mustard seed oil, nat. dms. lb. .17½ Nom.
Myristic acid, dms lb. .26 .30
tanks lb. .25¾- —
Myrobalans, Bombay ton. 52.00 -53.00
J-1, genuine, bgs., ex dock ton. 59.00 -60.00
J-1, crushed, bgs., ex dock ton. 73.00 -74.00
Myrobalans extract, Indian solid, 55% tannin, bgs., ex dock, plus duty lb. .19½- .10¾
Myrrh gum, cs lb. .50 - .55

N

Naphtha, high solvency (see Solvent naphtha, petroleum)
Naphtha, petroleum, cleaner's, 140°F, flash, tanks, east coast, New Jersey and New York gal. .18 - —
tanks, group 3 gal. .15 - .15¼
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tankwagon Boston, gal. .21½- —
Chicago gal. .299 - —
Cleveland gal. .24½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21½- —
Pittsburgh gal. .20 - —
Naphthalene, crude, dom., 74°, tanks tanks, frt. equald lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
bgs., t.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 - —
Imp., 78°, bgs., large lots lb. .035 - .05
Refd., indust., chipped, crushed, bgs., frt, alld lb. .12½- —
tanks, same basis lb. .11¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs. 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis lb. .18½- —
1-Naphthol-4 sulfonic acid (see Neille and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
Naphthol sulfonic mixed acid (see Cleve8s acid).
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).

"How'd those last five loads of J&L drums come in, Joe?"

"Checked 'em all with the drop light, Boss. Clean as a whistle... never saw a better lining job."

- J&L specialists, backed up by modern research, are ready to consult on your toughest packaging problems.
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- J&L steel containers provide engineered packaging for dependable transportation and safe storage.
- Precise fabrication and correct specification of fittings and closures.
- Prompt dependable delivery from nine plants.

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U.S.I. CHEMICAL NEWS

December ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1957

U.S.I. Among Winners of Chemical Engineering Achievement Award

The 1957 Award for Chemical Engineering Achievement, presented at *Chemical Engineering's* Annual Award Dinner at the Waldorf-Astoria in New York on Tuesday, December 3, is a group award recognizing the pioneering application of chemical engineering principles and proceses in extractive metallurgy.

U.S.I. is one of 75 organizations in industry and government to share this honor, and is cited for its contribution to zirconium and titanium process technology. The U.S.I. processes for these metals are based on sodium reduction of the metallic tetrachlorides and are believed to be the most economical processes developed to date for the production of metal sponges.

The citations of the Committee of 90 senior educators, under the chairmanship of Dr. Walter Whitman of M.I.T., are limited to the newer metals: uranium, plutonium, zirconium and hafnium, tantalum and niobium, lithium, boron, beryllium, thorium and the rare earth metals. Also included as important to the nuclear industry are aluminum, nickel and titanium.

New Process to Synthesize DL-Piperitone Depends On Sodium Dispersions

DL-Piperitone can now be synthesized from ethyl acetoacetate, a by-product of neoprene manufacture. As against natural piperitone, a synthetic material has the advantage of dependable supply. Consequently an efficient and inexpensive method of commercial production has been sought for some time.

The technique of dispersing metallic sodium in inert hydrocarbon media, developed and perfected over the past several years by U.S.I., is at last providing a practical solution to the problem. A proposed commercial process based on this technique follows:

(1) Sodium and isooctane are agitated together to form a dispersion which is added to ethyl acetate in the mole ratio of 7.3 to 1. The resulting solution is heated.

MORE

Vinyl Heat Stability Improved When ISOSEBACIC® Acid Is Used As Plasticizer Intermediate

New Plant Starting Up To Produce ISOSEBACIC Acid

A newcomer among plasticizer intermediates, ISOSEBACIC acid, is improving the heat stability of polyvinyl chloride films. The table below is based on tests conducted by a formulator of top-grade films for seat-cover use. It gives the comparison between diisooctyl Isosebacate, an ester of ISOSEBACIC acid, and a commonly used plasticizer, diisodecyl adipate.

Comparing columns (1) and (2), it can be seen that heat stability improves 50%, from 30 to 45 minutes, when 15 parts of the Isosebacate replace an equal quantity of adipate. A comparison of columns (3) and (4) reveals that heat stability is improved 100%, from 30 to 60 minutes, when both ester concentrations are raised to 22 parts.

Tests also indicate that ester plasticizers formulated with ISOSEBACIC acid have improved color, odor, and oil and soapy water extraction properties. These properties are important for applications such as auto seat covers, furniture upholstery covers, shower curtains, luggage and handbags.

ISOSEBACIC acid is a mixture of isomers of sebacic acid in about these proportions:

2-ethyl suberic acid 72-80%
2,5-diethyl adipic acid 12-18%
sebacic acid 6-10%

In addition to the vinyl plasticizer application, the material is being evaluated in polyurethane foams, polyamides, polyesters, alkyd resins and jet lubricants.

ISOSEBACIC acid is a product of U.S.I. research. It is derived from butadiene and sodium, both available in unlimited supply. U.S.I. is now in the process of starting up its new ISOSEBACIC plant at Tuscola, Ill.

Diborane Now Produced Commercially; 3 Amine Boranes Being Researched

Diborane, precursor of pentaborane rocket fuel and promising as an intermediate, reducing agent, catalyst and flame speed accelerator, is being marketed in commercial quantities.

According to the manufacturer, physical and chemical properties are now completely determined. Chemical reactions which have been thoroughly investigated include those with ammonia, amines, phosphines, ethers, carbonyl compounds, hydrocarbons, metal alkyds and hydrides, and sodium.

Amine Boranes in Research Quantity

Also available, although in research quantities only, are dimethylamine-borane, trimethylamine-borane and pyridine-borane. Their utilization as selective reducing agents in non-aqueous solvents has been of most interest. They are polymerization catalysts and inhibitors for acrylates and vinyl compounds. In addition, applications as antioxidants and stabilizing agents have been suggested as promising possibilities.

Table of Field Test Data Comparing Diisooctyl Isosebacate Against DIDA as a Vinyl Plasticizer Intermediate

FORMULATION	Parts Per Hundred of Resin			
	1	2	3	4
PVC	100	100	100	100
DIOP (diisooctyl phthalate)	18	18	22	22
DIDA (diisodecyl adipate)	15	—	22	—
Diisooctyl isosebacate	—	15	—	22
Phosphate plasticizer	11	11	—	—
Stabilizer A	2	2	2	2
Stabilizer B	1	1	1	1
Stabilizer C	1	1	1	1
1. Volatility (active carbon method) 24 hrs. at 158°F, % loss	1.38	1.21	0.92	1.07
2. Clash-Berg, Tf, °C	−24.4	−20.0	−23.9	−23.4
3. Heat Stability, minutes stable at 350°F	30	45	30	60
4. S.P.I. Impact Test (Masland) Pass/Fail °F	−20/−25	−20/−25	−20/−30	−25/−30
Gauge	0.019"	0.020"	0.019"	0.021"
5. Germicidal Lamp Test, 16 hrs, tack	slight	slight	slight	slight
6. Blooming, Room Temperature, press polished	O.K.	O.K.	O.K.	O.K.

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December ★ # U.S.I. CHEMICAL NEWS ★ 1957

CONTINUED

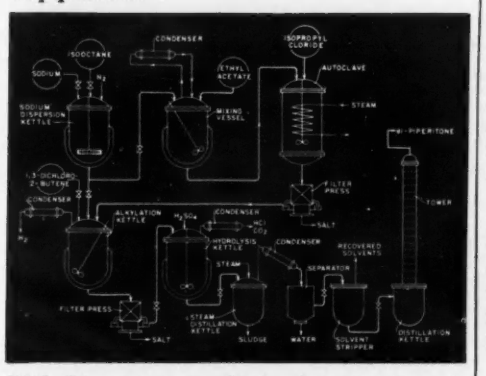
DL-Piperitone

(2) When reaction is complete, isopropyl chloride is added and the mixture is heated.

(3) The resultant slurry is filtered and the filtrate is alkylated with dispersed sodium to form the sodium enolate of ethyl oxisopropyl acetoacetate.

(4) 1,3-dichloro-2-butene in anhydrous benzene is added, and the mixture is refluxed until neutral.

(5) After filtration, the mixture is hydrolyzed with sulfuric acid, distilled and stripped of solvents. A crude, high-boiling dl-piperitone results. Further distillation yields pure dl-piperitone.



With this process, synthesis of DL-piperitone is reported to be commercially feasible.

New Standard Issued on Polyethylene Plastic Pipe

A new Commercial standard for black flexible polyethylene plastic pipe has been established by the Dep't. of Commerce, in cooperation with the Society of the Plastics Industry and the Nat'l. Sanitation Foundation.

The new standard, CS 197-57, specifies that "... the pipe shall be manufactured of virgin polyethylene, that no scrap material has been used, and that it is satisfactory for potable water." It also lists new dimensional tolerances and testing procedures.

Copies are available from Superintendent of Documents, U. S. Government Printing Office, Washington 5, D. C. for 10¢ a copy.

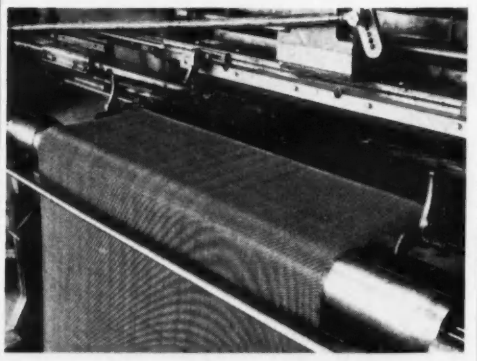
Corrosion-Resistant Mesh Is Now Produced with Improved Titanium Wire

The fabrication of titanium wire cloth now has reached a production basis. This is due primarily to improvements in quality of wire, which until recently lacked the needed uniformity and elongation, and had a tendency to work-harden rapidly and gall on metal-to-metal contact.

With wire-forming problems licked, and cloth being fabricated efficiently with high-purity and ductile grades of mill product, new applications are developing rapidly. Although noted for its high strength-to-weight ratio the biggest advantage of titanium in wire cloth form is its unique corrosion resistance. The metal has a corrosion rate of only .000001 inches per year in sea water, and is not subject to stress corrosion cracking in sea water or sea air.

Titanium wire cloth is being fabricated more and more into filter screens, catalyst screens or similar assemblies, where it handles mineral acid solutions, sodium hypochlorite, chlorides of all kinds, organic acids, alkalies and other reagents, with superior resistance to corrosion.

Several companies also report ability to make woven screen from zirconium wire, for those applications where zirconium corrosion resistance is superior to titanium.



Titanium wire cloth being woven (photo courtesy Cambridge Wire Cloth Company).

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U. S. I.

A silicone rubber which vulcanizes at room temperature has just been introduced for encapsulating, potting, sealing and caulking. Retention of rubber-like properties from —70 to 500°F is claimed. **No. 1301**

"The Rudiments of Feed Formulation", a 6 page reprint reviewing the industrial sources of animal feed constituents, the formulation of mixed feeds and the energy and nutrient values found therein, is now obtainable on request **No. 1302**

A new monomeric ester-type plasticizer for vinyls and cellulosics is described in a 4-page data sheet now available. Chemically it is di-2-ethylhexyl Isosebacate, reported about ⅓ lower in cost than the corresponding sebacate. **No. 1303**

Entirely new series of high molecular weight disazo red pigments for PVC and latex paints is said to combine the strength and brightness of organic pigments with the stability normally associated with inorganic pigments. **No. 1304**

Thioglycolic acid — its properties, reactions and uses — is described in a new 20-page catalog now available free of charge. An extensive bibliography of relevant patents and trade paper articles is included. **No. 1305**

Ethyleneurea (2-imidazolidinone), a new chemical, is now on the market. Used to make lacquers, varnishes, finishing agents, adhesives, plasticizers. Forms highly polymerizable vinyl and other derivatives. **No. 1306**

New series of zinc rich coatings to protect steel from the atmosphere and in marine and chemical use has been developed. Applied by brush or spray. Are said to be tougher, tighter, better bonded than old-type zinc coats. **No. 1307**

New adhesive for polyurethane foams is made with new, extremely fast-drying polymer, is said to lose its depression tack faster than any other material on market. Permits bonding with an adhesive as soft as the foam itself. **No. 1308**

A gas analyzer for measuring trace hydrogen, oxygen and nitrogen in metals has just been introduced for use right in the mill. Claimed to be only apparatus on market for both vacuum fusion and extraction. **No. 1309**

Pyridine N-oxide can now be obtained in commercial quantities. This exceptionally reactive derivative can be used to prepare many other pyridine chemicals valuable to the drug, dyestuff and allied industries. **No. 1310**

PRODUCTS OF U.S.I.

CHEMICALS FOR PLASTICS

ISOSEBACIC® Acid: mixture of isomers of C_{10} aliphatic dibasic acids.
PETROTHENE® Polyethylene Resins.
Butanol (Normal Butyl Alcohol): solvent for resins.
ANSOL® M: anhydrous denatured alcohol, special blend for resins.
ANSOL® PR: anhydrous denatured alcohol, special blend with higher ester content.
Normal Butyl Acetate: medium boiling solvent for nitrocellulose.
Ethyl Acetate, 95-98%: solvent for cellulose derivatives.
Ethyl Ether, Technical: solvent for resins.
Acetone (Dimethyl Ketone): solvent for vinyl resins, cellulose acetate.

OTHER PRODUCTS:

Alcohols: Ethyl (pure and all denatured formulas), Normal Butyl, Amyl, Fusel Oil; Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL® PR.

Esters, Ethers and Ketones: Normal Butyl Acetate, Dibutyl Phthalate, Diethyl Carbonate, Diethyl Oxalate, Ethyl Acetate, Ethyl Ether, Acetone, Diatol®.

Intermediates and Fine Chemicals: Acetoacetarylides, Dimethyl Hydrazine, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Chloride, Ethyl Sodium Oxalacetate, U.S.I. ISOSEBACIC® Acid, Methyl Hydrazine, Sodium Ethylate Solution, Triethyl Aluminum, Trimethyl Aluminum, Urethan USP (Ethyl Carbamate).

Animal Feed Products: Calcium Pantothenate, Choline Chloride Products, MOREA® Premix, Special Liquid Curbay®, DL-Methionine, Niacin USP, Riboflavin Concentrates, Vitamin B_{12} and Antibiotic Feed Supplements, Vacatone® 40, Vitamin D_3 and K_3 Products, Antioxidant (BHT) Products, Special Mixes, U.S.I. Permadry Products (Sealed-In Vitamin A).

Inorganic Chemicals: Ammonia, Caustic Soda, Chlorine, Metallic Sodium, Sodium Peroxide, Sulfuric Acid.

Metals: Titanium Sponge, Zirconium Sponge, Zirconium Platelets, Hafnium Oxide, Hafnium Sponge.

U.S.I. INDUSTRIAL CHEMICALS CO.
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Diborane Now Produced Commercially; 3 Amine Boranes Being Researched

Diborane, precursor of pentaborane rocket fuel and promising as an intermediate, reducing agent, catalyst and flame speed accelerator, is being marketed in commercial quantities.

According to the manufacturer, physical and chemical properties are now completely determined. Chemical reactions which have been thoroughly investigated include those with ammonia, amines, phosphines, ethers, carbonyl compounds, hydrocarbons, metal alkyds and hydrides, and sodium.

Amine Boranes in Research Quantity

Also available, although in research quantities only, are dimethylamine-borane, trimethylamine-borane and pyridine-borane. Their utilization as selective reducing agents in non-aqueous solvents has been of most interest. They are polymerization catalysts and inhibitors for acrylates and vinyl compounds. In addition, applications as antioxidants and stabilizing agents have been suggested as promising possibilities.

Table of Field Test Data Comparing Diisooctyl Isosebacate Against DIDA as a Vinyl Plasticizer Intermediate

FORMULATION	Parts Per Hundred of Resin			
	1	2	3	4
PVC	100	100	100	100
DIOP (diisooctyl phthalate)	18	18	22	22
DIDA (diisodecyl adipate)	15	—	22	—
Diisooctyl isosebacate	—	15	—	22
Phosphate plasticizer	11	11	—	—
Stabilizer A	2	2	2	2
Stabilizer B	1	1	1	1
Stabilizer C	1	1	1	1
1. Volatility (active carbon method) 24 hrs. at 158°F, % loss	1.38	1.21	0.92	1.07
2. Clash-Berg, Tf, °C	−24.4	−20.0	−23.9	−23.4
3. Heat Stability, minutes stable at 350°F	30	45	30	60
4. S.P.I. Impact Test (Masland) Pass/Fail °F	−20/−25	−20/−25	−20/−30	−25/−30
Gauge	0.019"	0.020"	0.019"	0.021"
5. Germicidal Lamp Test, 16 hrs, tack	slight	slight	slight	slight
6. Blooming, Room Temperature, press polished	O.K.	O.K.	O.K.	O.K.

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December ★ **U.S.I. CHEMICAL NEWS** ★ 1957

CONTINUED

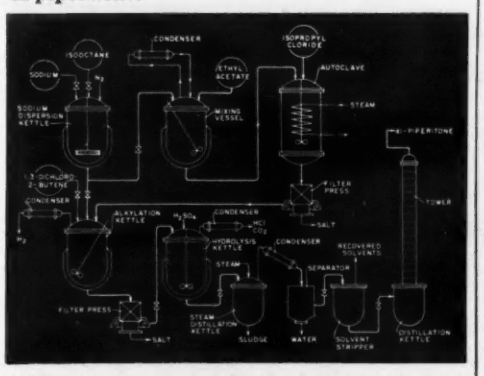
DL-Piperitone

(2) When reaction is complete, isopropyl chloride is added and the mixture is heated.

(3) The resultant slurry is filtered and the filtrate is alkylated with dispersed sodium to form the sodium enolate of ethyl oxisopropyl acetoacetate.

(4) 1,3-dichloro-2-butene in anhydrous benzene is added, and the mixture is refluxed until neutral.

(5) After filtration, the mixture is hydrolyzed with sulfuric acid, distilled and stripped of solvents. A crude, high-boiling dl-piperitone results. Further distillation yields pure dl-piperitone.



With this process, synthesis of DL-piperitone is reported to be commercially feasible.

New Standard Issued on Polyethylene Plastic Pipe

A new Commercial standard for black flexible polyethylene plastic pipe has been established by the Dep't. of Commerce, in cooperation with the Society of the Plastics Industry and the Nat'l. Sanitation Foundation.

The new standard, CS 197-57, specifies that "... the pipe shall be manufactured of virgin polyethylene, that no scrap material has been used, and that it is satisfactory for potable water." It also lists new dimensional tolerances and testing procedures.

Copies are available from Superintendent of Documents, U. S. Government Printing Office, Washington 5, D. C. for 10¢ a copy.

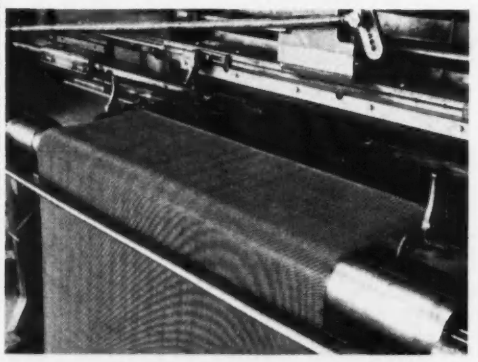
Corrosion-Resistant Mesh Is Now Produced with Improved Titanium Wire

The fabrication of titanium wire cloth now has reached a production basis. This is due primarily to improvements in quality of wire, which until recently lacked the needed uniformity and elongation, and had a tendency to work-harden rapidly and gall on metal-to-metal contact.

With wire-forming problems licked, and cloth being fabricated efficiently with high-purity and ductile grades of mill product, new applications are developing rapidly. Although noted for its high strength-to-weight ratio the biggest advantage of titanium in wire cloth form is its unique corrosion resistance. The metal has a corrosion rate of only .000001 inches per year in sea water, and is not subject to stress corrosion cracking in sea water or sea air.

Titanium wire cloth is being fabricated more and more into filter screens, catalyst screens or similar assemblies, where it handles mineral acid solutions, sodium hypochlorite, chlorides of all kinds, organic acids, alkalies and other reagents, with superior resistance to corrosion.

Several companies also report ability to make woven screen from zirconium wire, for those applications where zirconium corrosion resistance is superior to titanium.



Titanium wire cloth being woven (photo courtesy Cambridge Wire Cloth Company).

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U. S. I.

A silicone rubber which vulcanizes at room temperature has just been introduced for encapsulating, potting, sealing and caulking. Retention of rubber-like properties from —70 to 500°F is claimed. **No. 1301**

"The Rudiments of Feed Formulation", a 6 page reprint reviewing the industrial sources of animal feed constituents, the formulation of mixed feeds and the energy and nutrient values found therein, is now obtainable on request **No. 1302**

A new monomeric ester-type plasticizer for vinyls and cellulosics is described in a 4-page data sheet now available. Chemically it is di-2-ethylhexyl Isosebacate, reported about ⅓ lower in cost than the corresponding sebacate. **No. 1303**

Entirely new series of high molecular weight disazo red pigments for PVC and latex paints is said to combine the strength and brightness of organic pigments with the stability normally associated with inorganic pigments. **No. 1304**

Thioglycolic acid — its properties, reactions and uses — is described in a new 20-page catalog now available free of charge. An extensive bibliography of relevant patents and trade paper articles is included. **No. 1305**

Ethyleneurea (2-imidazolidinone), a new chemical, is now on the market. Used to make lacquers, varnishes, finishing agents, adhesives, plasticizers. Forms highly polymerizable vinyl and other derivatives. **No. 1306**

New series of zinc rich coatings to protect steel from the atmosphere and in marine and chemical use has been developed. Applied by brush or spray. Are said to be tougher, tighter, better bonded than old-type zinc coats. **No. 1307**

New adhesive for polyurethane foams is made with new, extremely fast-drying polymer, is said to lose its depression tack faster than any other material on market. Permits bonding with an adhesive as soft as the foam itself. **No. 1308**

A gas analyzer for measuring trace hydrogen, oxygen and nitrogen in metals has just been introduced for use right in the mill. Claimed to be only apparatus on market for both vacuum fusion and extraction. **No. 1309**

Pyridine N-oxide can now be obtained in commercial quantities. This exceptionally reactive derivative can be used to prepare many other pyridine chemicals valuable to the drug, dyestuff and allied industries. **No. 1310**

PRODUCTS OF U.S.I.

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ISOSEBACIC® Acid: mixture of isomers of C_{10} aliphatic dibasic acids.
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Normal Butyl Acetate: medium boiling solvent for nitrocellulose.
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Ethyl Ether, Technical: solvent for resins.
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2-Napthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
a-Naphthol bbls., frt. alld	lb.	1.00	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.33	—
bbls., l.c.l., works	lb.	.35	—
Naphthol ITR red toner, bbls., works	lb.	5.50	—
a-Naphthylamine, bbls., frt. alld	lb.	.50	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60	—
Naringin, fib dms.	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms	lb.	.30	.33
20° cold test, dms.	lb.	.29	.32
30° cold test, dms	lb.	.28	.31
Neocinchophen USP, dms., frt. adjusted	lb.	7.00	8.00
Neomycin sulfate, fib, dms., 1-kilo basis activity	gram.	.35	—
fib dms. 100-999-gram lots, basis activity	gram.	.40	—
Neroli oil, NF, French, bots	lb.	550.00	575.00
Spanish, bots	lb.	70.00	—
Nerolin, cns	lb.	2.55	2.85
Nevile and Winther's acid, dms., frt. alld	lb	1.30	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd	lb.	.73	.80
Nickel carbonate, bbls., dlvd	lb.	.80¾	.87¾
Nickel chloride, bbls., dlvd.	lb.	.40½	.48½
Nickel formate, bbls., ton lots, frt. alld	lb.	.72	.73
Nickel metal electro cathodes, cs., works	lb.	.74	—
Nickel nitrate, bbls., works	lb.	.32½	.33½
Nickel oxide, black, bbls.	lb.	.84	—
Green, bbls	lb.	.85	—
Nickel sulfate, bgs., c.l., dlvd.	lb.	.32½	—
bgs., l.c.l., dlvd.	lb.	.33½	.40½
Nicotinamide USP, dms., frt. adjusted	kilo	9.50	9.80
Nicotinamide hydrochloride, dms., frt. adjusted	kilo.	9.50	9.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld	lb.	1.20	—
40%, manufacturers, 500-lb. dms., frt. alld	lb	1.05	—
Nicotinic acid USP, dms., dlvd.	kilo	8.00	8.30
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.11½	.12
Nikethamide, cbys.	lb.	7.50	—
Nitric acid, 36° Be., cbys., c.l., works, E 100 lbs.		5.75	—
cbys., l.c.l. works, E 100 lbs.		6.05	6.85
38° Be. cbys. c.l. works, E. 100 lbs		6.25	—
cbys., l.c.l. works, E 100 lbs.		6.55	7.35
40° Be., cbys., c.l. works, E. 100 lbs.		6.75	—
cbys., l.c.l., works, E 100 lbs.		7.05	7.85
42° Be cbys., c.l., works, E. 100 lbs.		7.25	—
cbys., l.c.l., works E 100 lbs.		7.55	8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs.		3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs.		4.90	—
Nitric acid, CP, NF, consumer, cbys. extra, l.c.l., same basis, c.l. works	lb.	.18½	—
	lb.	.20	.20½
5-pt. bots. extra, cs. c.l., same basis	lb.	.22½	—
5-lb bots., extra, cs., l.c.l., same basis	lb.	.24	.25
n-Nitroaniline, cryst., dms., frt. alld	lb.	1.15	—
Paste, dms. frt alld. 100% basis.	lb.	1.10	—
o-Nitroaniline, flaked, dms. t.l., frt. alld	lb.	.49	—
dms., l.t.l., frt. alld.	lb.	.51	—
o-Nitroaniline orange toner, kegs,	lb.	1.35	—
p-Nitroaniline dms., frt. alld	lb.	.445	—
Nitrobenzene, dbl dist., dms., c.l., frt. alld	lb.	.14	—
dms. l.c.l., frt. alld.	lb.	.15	—
tanks, frt. alld.	lb.	.12	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.72	—
dms., l.c.l., works	lb.	.73	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80 125-175, seconds, bbls., c.l., works	lb.	.34	—
bbls., l.c.l., same basis	lb.	.35	.37
18-20 cps. bbls. c.l. same basis.	lb.	.36	—
bbls., l.c.l., same basis	lb.	.37	.39
Nitrocellulose, ester-soluble, 250-400, 600-1,000 seconds, bbls., l.c.l., same basis	lb.	.40	.42
Spirit-soluble, 30-35 cps., ¼, ½, seconds bbls., c.l., same basis	lb.	.41	—
bbls. l.c.l. same basis	lb.	.42	.44
Nitrocellulose, spirit-soluble, 5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.40	—
bbls., l.c.l., same basis	lb.	.41	.43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable			
o-Nitrochlorobenzene dms. c.l., frt. alld	lb.	.15	—
dms. l.c.l. same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Nitrochlorobenzene, dms.	lb.	.26	.27
2-Nitro-4-chlorophenol dms.	lb.	.75	—
Nitroethane dms., c.l. dlvd. E	lb.	.24	—
dms. l.c.l. dlvd E	lb.	.24¼	—
tanks dlvd E	lb.	.22½	—
Nitroethane prices West of Rockies are 1c higher.			
Nitrogen solutions tanks, frt. equald unit.		1.24	—
Nitrogenous process tankage, bulk, works unit-ton.		3.00	4.00
Nitrogenous sewage sludge, bulk, works, unit-ton.		2.95+	.50
Nitromethane dms. c.l. dlvd. E	lb.	.24	—
dms., l.c.l., dlvd E	lb.	.24¾	—
tanks dlvd E	lb.	.22½	—
Nitromethane prices West of Rockies are 1c higher.			
a-Nitronaphthalene bbls. frt. alld.	lb.	.41	—
o-Nitrophenol dms. works, frt. equald	lb.	.94	—
p-Nitrophenol dms. c.l., frt. alld.	lb.	.51	—
dms., l.c.l., frt. alld	lb.	.53	—
1-Nitropropane, dms., c.l., frt. alld. E	lb.	.22¼	—
dms., l.c.l., same basis	lb.	.23¼	—
tanks, same basis	lb.	.21	—
2-Nitropropane, dms., c.l., frt. alld. E	lb.	.18½	—
dms., l.c.l. same basis	lb.	.19½	—
tanks, same basis	lb.	.16	—
Nitropropane prices west of Rockies are 1c per lb. higher.			
o-Nitrotoluene, dms., c.l., frt. alld	lb.	.10	—
dms., l.c.l. frt. alld	lb.	.11	—
tanks, frt. alld	lb.	.09	—
p-Nitrotoluene, dms., works	lb.	.32	—
m-Nitro-p-toluidine, dms	lb.	1.43	—
Nitrous ether, conc., bots., 1pt-lb. lots	lb.	1.28	1.35
Nonyl phenol, dms., c.l., frt. alld.	lb.	.26½	—
dms., l.c.l. frt. alld	lb.	.27½	—
tanks, frt. alld	lb.	.24½	—
Nutgalls, Aleppo, bgs	lb.	.35	.38
Chinese, bgs	lb.	No prices.	
Nutmeg, East Indian, bgs	lb.	2.00	—
West Indian, bgs	lb.	2.00	—
Nutmeg oil, USP dist. East Indian, cns., dms	lb.	12.75	15.00
USP dist. West Indian, cns., dms.	lb.	12.75	17.00
Nux vomica, bls	lb.	.10	.12
Powd., bbls., bxs	lb.	.15	.17

O

Ocher (see Iron oxide yellow, nat.).			
Ocotea cymbarum oil, dms	lb.	.55	.65
Octane, indust., tanks, Bayonne, N. J	gal.	.19	—
tanks, Baytown, Tex	gal.	.15¾	—
Borger, Tex	gal.	.15¾	—
1-Octanol, tech., dms., c.l., dlvd., Zone 1	lb.	.37	—
dms., l.c.l., dlvd	lb.	.39	—
tanks, dlvd.	lb.	.34½	—
Octyl alcohol, perfumer's grade, bots	lb.	1.60	3.25
Octyl alcohol, tech. (see 1-Octanol, tech).			
Octyl phenol, bgs., c.l., works	lb.	.24	—
bgs., l.c.l., works	lb.	.24½	—
tanks, works	lb.	.23	—
Octyl phenol in dms., 1lc. higher.			

2-Naphthylamine-6-Sulfonic Acid—Orthoanisidine

Oils

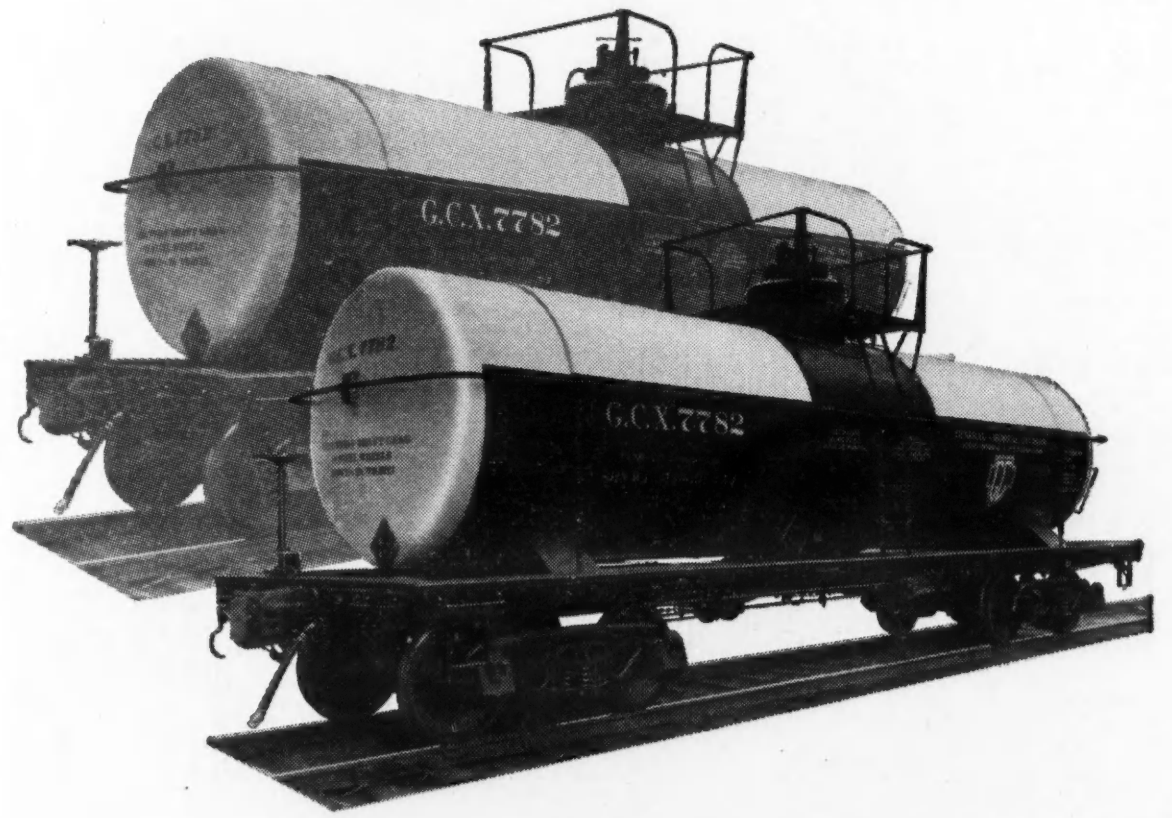
Oil quotations, formerly grouped under one heading, are now listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms.	lb.	.19	.19½
tanks	lb.	.17⅞	—
Oleic acid, dbl.-dist. (white), dms.	lb.	.21¼	.23¾
tanks	lb.	.18¾	—
Single-dist., dms.	lb.	.20	.22½
tanks	lb.	.17½	—
Oleo oil, extra, dms.	lb.	.19	.19½
Oleostearine, dms.	lb.	.15¼	.15½
Oleum (see Sulfuric acid, fuming).			
Olibanum gum, siftings, cs	lb.	.20	Nom.
Tears, cs	lb	.22	.30
Olibanum oil, bots	lb	5.50	7.65
Extra fine, bots	lb	8.00	9.50
Olive oil, edible, dms., spot duty-paid	gal.	2.75	3.00
Olivine, crude, works	ton.	12.00	—
20 mesh, works	ton.	15.00	—
100 mesh, works	ton.	20.00	—
Opium, USP, cns	oz.	19.20	19.45
USP, gran., cns.	oz.	21.65	21.90
powd., cns	oz.	21.65	21.90
Orange oil, expressed, USP, Brazilian, cns., dms	lb.	No stocks.	
Expressed, USP, Calif., cns., dms.	lb.	.75	1.75
Florida, cns., dms.	lb.	.55	—
Messina, cns	lb	3.85	5.85
West Indian, cns., dms	lb	2.50	3.65
Sesquiterpeneless, bots	lb.	65.00	120.00
Sweet, dist., cns., dms.	lb.	.70	.80
Orange peel, bitter, Haitian, bls	lb	.14	.16
Sweet, bls.	lb.	.14	—

Orange Pigments

Orange pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns	lb	2.00	—
Orris root, Florentine, bls	lb.	.55	—
powd., bbls., bxs	lb.	.68	—
Verona, bls	lb	.35	.40
powd., bbls., bxs	lb.	.44	—
Orthoanisidine (see o-Anisidine).			



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This depends on a number of factors. The acid strength . . . the nature and amounts of contaminants . . . the tonnage available . . . the distance of your location from our nearest plant—all have bearing. Generally, spent acids containing 70-80% sulfuric acid, or higher, can be reclaimed if they do not contain impurities harmful to the equipment.

General Chemical has many years of experience in solving spent acid problems of every kind. We will be happy to review the economics of converting *your* spent acid, and the assistance of our technical service staff is always available to help solve any handling and disposal problems you may have. Just call the nearest General Chemical office listed below.

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Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Osage orange, cryst., No. 1, bbls, l.c.l lb. .40 - —
Extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots gram 3.00 - 4.00
Ouricury wax, crude, bgs lb. .67 - .69
Refd., pure, bgs lb. .72 - .73
Oxalic acid, bbls., c.l., works lb. .18½- —
bbls., 10,000-lb. lots, works lb. .18¾- —
bbls., smaller lots, works lb. .19¾- —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld lb 1.14 - 1.17
Oxyquinolin sulfate, cns. 100-lb. lots, works lb 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1520- .1620
Palm oil, acid, dist., dms lb. .15¾- .19¼
tanks lb. 13¾- .14¼
Palmarosa oil, cns lb. 8.50 - —
Papain, African, bots lb. No prices.
Ceylon, bots. lb. No prices.
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Rumanian, bgs. lb. .34 - —
Spanish, bgs. lb. .32 - .46
Yugoslavian, bgs lb. .35 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Para-aminosalicylic acid (see p-Aminosalicylic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.15 - —
Chlorinated, kgs. lb. 1.30 - —
Paraffin, crude, scale white, 123°-127°F. ASTM, tanks, refy. lb. .0710- —
Paraffin, fully refd., 122°-124°F, ASTM, tanks, refy lb. .0815- —
125°-127° F. ASTM, tanks, refy. lb. .0815- —
130°-132°F, ASTM, tanks, refy. lb. .0815- —
132°-134° F., ASTM, tanks, refy. lb. .0815- —
135°-137°F, ASTM, tanks, refy. lb. .0815- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .11¼- —
bgs., l.c.l., frt. alld lb. .13¼- .14¼
91%, powd., bgs., c.l., ex whse lb. .167 - —
bgs., l.c.l., ex whse lb. .182 - —
USP X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½- —
Paraldehyde, tech., 99%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., c.l., frt. alld. lb. 1.36 - —
dms., l.c.l., frt. alld. lb. 1.41 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulpnonamide (see p-Toluenesulfonamide).
Paris green, dealers, dms., c.l., frt. alld lb. .44 .47
dms., l.c.l., same basis lb. .45 .48
Passion flower herb, bls. lb. No stocks.
Patchouli oil, dms lb. 5.10 - 5.25
Peach kernel oil, USP, (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd., N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .50 - —
Peacock blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Peanut meal, 45%, old process, bgs., mills ton 52.00 - —
Peanut oil, crude, tanks, f.o.b. mills. lb. .16½- —
Refd., dms. lb. .22¼- .22½
tanks lb. .20¼- —
Pectin, NF, citrus, dom., powd., bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, rapid set, bbls. lb. 1.32 - —
Slow set, bbls. lb. 1.35 - —
Imp., Danish, ex whse. lb. 1.28 - —
Penicillin, potassium, cryst., bulk 1,000,000 units. .0675- .0700
Penicillin, procaine, bulk 1,000,000 units. .0675 -.0700
Penicillin, sodium, bulk 1,000,000 units. .0775- .0800
Pennyroyal oil, USP, imported, cns. lb. 2.30 - 3.00
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .22 - —
bgs., l.c.l., same basis lb. .23½- .30
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd. E lb. .32 - —
bgs., l.c.l., dlvd. E lb. .33 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pepper, black, Malabar, spot bgs. lb. .25 - —
Red, Gondar, spot, bgs lb. .30 - —
Japanese, hontaka, bgs lb. .36 - —
Japanese, birdseyes, bgs., new crop lb. No prices.
Mombasa, bgs. lb. .60 - —
Nigerian, bgs. lb. .36 - —
Turkish, bgs. lb. No prices.
White, Muntok, bgs lb. .33½- —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP, bls. lb. .85 - —
Peppermint oil, nat., dms. lb. 4.25 - 4.75
Redist., USP, dms. lb. 4.50 - 5.00
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd lb. .15¼- —
tanktruck, 1,000 gal., min., dlvd. lb. .12¾- —
tanks, dlvd lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.35 - —
Paste, bbls., frt. alld lb. 1.30 - —
Persic oil, USP (see Apricot kernel oil).
Peru balsam, dms. lb. 1.50 - 2.25
Petitgrain oil, South American, cns., dms lb. 2.05 - 3.00
Petrolatum, cream, dms., c.l., refy. lb. .07¾- —
dms., l.c.l., dlvd lb. .10¼- —
tanks, refy lb. .05½- —
Extra amber, dms., c.l., refy lb. .06¾- —
dms., l.c.l., dlvd lb. .09¼- —
tanks, refy lb. .04½- —
USP, lilly white, dms., c.l., refy. lb. .08¼- —
dms., l.c.l., dlvd lb. .10½- —
tanks, refy lb. .05⅞- —
USP, snow white, dms., c.l., refy. lb. .08⅞- —
dms., l.c.l., dlvd lb. .11 - —
tanks, refy lb. .06⅜- —
soft yellow, dms., c.l., refy lb. .06¾- —
dms., l.c.l., dlvd lb. .09¼- —
tanks, refy lb. .04½- —
Petroleum pitch (see Asphalt, petroleum).

Petroleum Products

Petroleum product quotations, formerly grouped under one heading, are now listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb. .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies lb. .18 - —
non-ret. dms., l.c.l., same basis. lb. .19 - —
tanks, same basis lb. .16 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
non-ret. dms., l.c.l., same basis. lb. .18½- —
tanks, same basis lb. .15½- —
39°C. or above, tar distilled non-ret. dms., c.l., same basis lb. .19½- —
non-ret. dms., l.c.l., same basis. lb. .20½- —
tanks, same basis lb. .17½- —

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PETROLEUM SOLVENTS

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Phenol, USP syn., dms., c.l., t.l., frt. alld.	lb.	.20¼-	—
dms., same basis	lb.	.22¼-	—
tanks, same basis	lb.	.18¼-	—
Phenolphthalein, USP or yellow, fib. dms., 2,000-lb. lots	lb.	1.30 -	—
fib. dms., smaller lots	lb.	1.32 -	1.37
Phenothiazine drencn fib. dms., t.l., dlvd	lb.	.44 -	—
fib. dms. t.t.l., same basis	lb.	.47 -	—
NF, fib. dms., t.l., same basis	lb.	.43 -	—
fib. dms. t.t.l., same basis	lb.	.46 -	—
Phenyl acetate, dms., 100-lb. lots, works	lb.	.50 -	—
Phenyl salicylate (see Salol)			
Phenylacetaldehyde, soln. 50%, bots.	lb.	2.95 -	—
100%, bots.	lb.	4.00 -	4.65
Phenylacetic acid, pure, cryst., cns.	lb	1.45	1.75
dl-Phenylalanine, dms., works	lb.	27.00	-37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms. 200-lb lots dlvd. E.	lb.	3.45 -	—
fib. dms., smaller lots, dlvd E	lb.	3.50 -	—
N-Phenyldiethanolamine, dms., c.l., dlvd E	lb.	.41 -	—
dms., t.c.l., dlvd. E	lb.	.42 -	—
tanks, dlvd. E	lb.	.38½-	—
m Phenylenediamine dms. frt alld.	lb.	.95 -	—
o-Phenylenediamine coml., 100 to 1,000 lbs., fib dms. works	lb	1.70	1.80
p-Phenylenediamine, refd., dms., works	lb.	1.42 -	—
tech., dms., works	lb.	1.30 -	—
Phenylethanolamine dms., c.l., works	lb.	75½-	—
dms. t.c.l., same basis	lb.	76¼-	—
Phenylethyl acetate, bots.	lb.	1.30 -	1.60
b-Phenylethylamine dms., 1,000-lb. lb. lots, works	lb.	1.10	—
dms. smaller lots works	lb.	1.15 -	1.40
2-Phenylethyl alcohol, extra, dms.	lb.	1.14	1.45
Standard, dms	lb.	1.10	1.60
Phenylglyconic acid (see Mandelic acid)			
Phenylhydrazine base CP, btos	lb.	3.00 -	3.07
Phenylhydrazine hydrochloride, coml., kgs., works	lb	1.75 -	—
Purif., bots., works	lb	5.17 -	—
1-Phenyl-3-methyl pyrazolone-5, fib dms. 250-lb. lots, dlvd E	lb.	1.80 -	—
fib dms. smaller lots dlvd E	lb	2.10 -	—
Phenylethylphenyl acetate, bots	lb.	4.00 -	4.25
o-Phenylphenol dms. t.c.l. works.	lb.	.42	.44
p-Phenylphenol, bgs. c.l., works	lb.	.38½-	—
bgs. l.c.l. works	lb.	.43 -	—
Philippine copal gum, pale, chips, bgs	lb.	.23¾-	.26
Pale, nubs, bgs	lb.	.32½-	.36
seeds, bgs.	lb.	.20	Nom.
sorts, bgs.	lb.	.22¾-	.25
Phloroglucinol, coml., fib. dms., works	lb.	6.40 -	—
CP, bots., works	lb.	17.75 -	—
Tech., fib. dms., works	lb.	10.45 -	—
Phloxin red toner (see Eosin red toner)			
Phosgene, ret., cyls., works	lb.	.15½-	—
Phosphate, defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports, New Orleans	ton.	48.00 -	—
Florida, land pebble, run-of-mine, washed, dried unground, 66-68% b.p.l., bulk, c.l., mines.	long-ton.	5.26 -	—
68-70% b.p.l., bulk, c.l., same basis	long-ton.	5.66 -	—
70-72% b.p.l., bulk, c.l., same basis	long-ton.	6.31 -	—
74-75% b.p.l., c.l., bulk, same basis	long-ton.	7.31 -	—
76-77% b.p.l., c.l., bulk, same basis	long-ton.	8.31 -	—

Above Florida prices are based on fuel oil at $2.87 per bbl. and labor at $1.47.

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	7.00 -	—
cbys., l.c.l., same basis.	100 lbs.	7.25 -	7.75
tanks, t.w., works	100 lbs.	5.60 -	—
Food grade, 80%, cbys., c.l., frt. equald	100 lbs.	7.85 -	—
cbys., l.c.l., works	100 lbs.	8.10 -	9.35
tanks, t.w., works	100 lbs.	6.00 -	—
Phosphoric acid, NF, 85%, cbys., c.l., works	100 lbs.	8.50 -	—
cbys., l.c.l., works	100 lbs.	8.75 -	9.00
tanks, t.w., works	100 lbs.	6.65 -	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.48 -	—
dms., smaller lots, works	lb.	.49 -	.50
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20 -	.20½
dms., t.c.l., works, frt. equald	lb.	.21½-	—
tanks, works, frt. equald	lb.	.19 -	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14 -	—
dms., t.c.l., works	lb.	.15 -	—
tanks, works	lb.	.12½-	—
Phosphorus pentasulfide, solid, dms., c.l., works	lb.	.11½-	—
dms., t.c.l., works	lb.	.12½-	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1395-	.1450
dms., t.c.l., works	lb.	.1550-	.1650
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.38	—
dms., t.c.l., works	lb.	.39	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14 -	—
dms., t.c.l., works	lb.	.15 -	—
tanks, works	lb.	.12½-	—
Phthalic anhydride, bgs., c.l., works, frt. equald	lb.	.21 -	—
bgs., t.c.l., same basis	lb.	.22 -	—
tanks, same basis	lb.	.20½-	—
Phthalimide, 97-98%, dms., frt. allowd	lb.	.65 -	—
Phthalocyanine blue, full strength, bbls., dlvd. N. of Tenn and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island St. Louis	lb	3.45 -	—
Resinated, bbls., same basis	lb	3.00 -	—
water dispersable, bbls., same basis	lb.	1.69 -	—

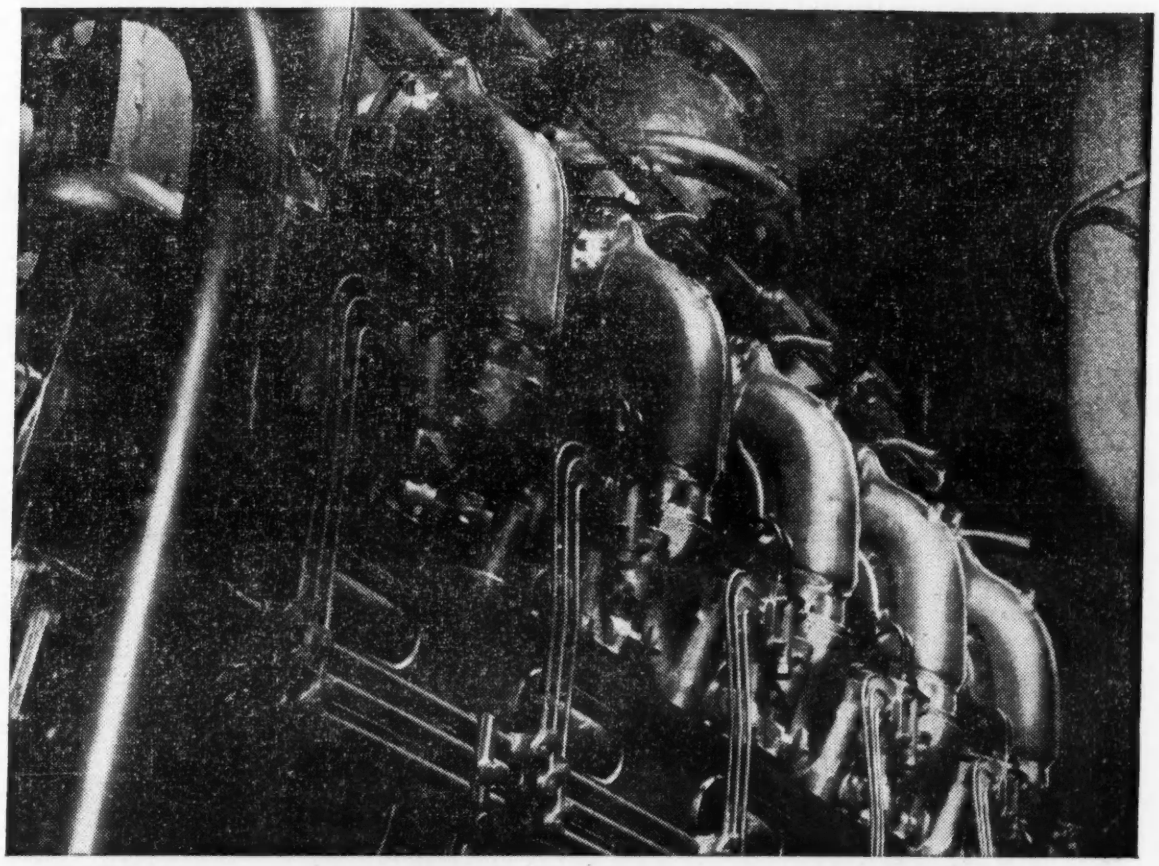
Phthalocyanine blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Ohama, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald with Chicago.

Phthalocyanine green toner, bbls., works	lb	3.95 -	—
Resinated, bbls.	lb	3.50 -	—
Water dispersable, bbls.	lb	1.71 -	—
Phthalylsulfacetamide 1,000-lb. lots or more	lb	5.00 -	—
NF	lb	5.20 -	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.43	.43½
dms., t.c.l. works, frt. equald	lb.	.44	—
tanks, same basis	lb.	.415	.422
b,g-Picoline, 5°C. dms., c.l., works.	lb.	.32½-	—
dms., t.c.l. works	lb	.33	—
g-Picoline, 98%, dms., t.c.l., dlvd	lb.	2.00 -	—
Picric acid, NF, bbls.	lb.	.65 -	—
Tech., bbls.	lb.	.44 -	—
Pigment green B, kgs.	lb.	1.38 -	—
Pilocarpine hydrochloride, USP, bots.	oz.	4.75 -	5.25
Pilocarpine nitrate, USP, bots., vials.	oz.	4.65	4.75
Pimento, Jamaican, bgs.	lb.	.60 -	—
Mexican, bgs.	lb.	.33 -	—
Pimento berry oil, NF, dms.	lb.	3.75 -	9.25
Pimento leaf oil, cns.	lb.	1.85 -	2.00
Pine oil, dest.-dist., dms., t.c.l., works	lb.	.15 -	—
dms., t.c.l., ex whse New York.	lb.	.17 -	—
Steam-dist., dms., ex whse, New York	lb.	.176 -	—
dms., dlvd.	lb.	.179 -	—
Pineneedle oil, Siberian (see Abies Siberica oil).			
Pinetar oil, coml. dms., c.l., works.	lb.	.0561-	—
dms., t.c.l., works	lb.	.0634-	—
dms., c.l., ex whse., New York.	lb.	.0745-	—
tanks, works	lb.	.046 -	—
Pinetar oil, rectified, NF, dms., included, t.c.l., works, south	gal.	1.25 -	—
dms. incl. t.c.l. ex whse., New York	gal.	1.36½-	—
Refd., dms., incl., t.c.l., works	gal.	1.12 -	—
dms. incl., t.c.l., ex whse., New York	gal.	1.23½-	—
Pink root, bls.	lb.	2.50	—
Piperazine 95% or better, dms., c.l., frt. alld.	lb.	2.45 -	—
dms., t.c.l., same basis	lb.	2.50 -	—
Piperazine citrate, 100-lb. lots	lb.	1.47 -	—
Piperazine hexahydrate, 100-lb. lots.	lb.	1.22 -	—
Piperadine, dist., dms., frt. equald.	lb.	2.60 -	2.70
Piperonyl butoxide, dms., dlvd. E	lb	4.50 -	5.05
Piperonyl cyclonene dms. dlvd. E	lb.	3.70	4.25

Pitches

Pitch quotations, formerly grouped under one heading, are now listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	77.00	-80.00
Pleurisy root, bls.	lb	.45	.50
Podophyllum resin, NF, dms	lb.	15.60	-16.10
Poke root, bls.	lb.	.19	.22
Pontianak copal gum, chips, bgs	lb.	.26	—
Nubs, bgs	lb.	.37	.40
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units.		.52 -	—
bulk, bots., 25-50 billion units, 1,000,000 units.		.54 -	—
bulk, bots., 1-25-billion units, 1,000,000 units.		.56 -	—
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb	41	—
dms., 10,000-20,000-lb lots, works	lb	43	—
dms., smaller lots, works	lb	46	.48
Polyoxyethylene sorbitan tristearate, dms. 20,000-lb lots, works.	lb	41	—
dms., 10,000-20,000-lb lots, works.	lb.	43	—
dms. smaller lots works	lb	46	.48
Poppy seed, Argentine, bgs	lb.	.21	—
Dutch, bgs.	lb.	.20¼-	—
Danish	lb.	.18½-	—
Polish, bgs.	lb.	.19 -	—
Turkish, bgs.	lb.	.19½-	—
Potash, caustic, liq., 45% basis, dms., c.l., works	100 lbs.	4.25 -	—
dms., l.c.l., same basis	100 lbs.	5.05 -	—
tanks, same basis	100 lbs.	3.70 -	—
Potash, caustic, reg., flake, 88-92%, dms., c.l., same basis	100 lbs.	9.15 -	—
dms., l.c.l., same basis	100 lbs.	10.20 -	—
Solid, 88-92%, dms., c.l., works.	100 lbs.	8.70 -	—
dms., l.c.l., works	100 lbs.	9.75 -	—
Potassium acetate, NF, dms	lbs	.31	.36
Potassium bicarbonate, USP, gran.,	dms lb.	.22	—
USP, powd., dms	lb.	.24	—



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Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, dom., gran. or powd., dms., c.l. lb. .40 - —
dms., 5,000 lbs., 1 shipt lb. .40½- —
dms., smaller lots lb. .41 - .43
Imp., gran. or powd., kgs lb. .33½- .37
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs. lb. .39 - .40
Potassium carbonate, NF, gran., bbls., dms lb. .20 - —
NF, powd., bbls., dms lb. .21 - .22
Tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
bbls., l.c.l., works 100 lbs. 8.65 - —
Potassium chlorate, cryst., dms, c.l., dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
— works lb. .12½
NF, cryst., works lb. .12¾- —
dms., 2,000 lbs. or more, works lb. .16¾- —
Powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Gran., 25 lb. metal dms lb. .36 - —

Potassium chloride, agricultural (see Potassium muriate).
Potassium chloride, indust., 99.9% KCl, bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
Potassium chloride, indust., 99.3% KCl, bulk, c.l., works ton 27.00 - —
bgs., c.l., works ton 31.50 - —
USP, cryst., dms. lb. .20 - .22
gran., dms. lb. .21 - .23
powd., dms lb. .24 - .26
Potassium chromate, tech., bgs lb. .50 - .50½
Potassium citrate, USP, gran., dms. lb. .43 - —
USP, powd., dms lb. .40½- .41½
Potassium cyanide, dms. 20,000-lb. lots or more works lb. .45 - —
dms., 2,000-19,999-lb. lots, works lb. .455 - —
dms., smaller lots, works lb. .465 - —
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, bgs., ton lots lb. .23 - —
bgs., smaller lots lb. .23½- —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, dms. lb. 1.67 - —
Potassium guaiacolsulfonate, NF, dms lb. 2.10 2.30
Potassium hydroxide, tech. (see Potash, caustic).

Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Potassium iodide, dms. lb. 1.90 - 1.95
Potassium manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms. lb. .20 - .21
Powd., dms. lb. .25 - —
Potassium muriate, standard and gran., 59-63% K_2O, bulk, c.l., works, base price unit-ton. .35 - —
bulk, c.l., works, July forward unit-ton. .35½- .37
Potassium muriate, gran., 60-63% K_2O, bgs., c.l., works, contract price ton. 26.25 -26.50
bgs., c.l., works, list price ton. 27.45 -27.50
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs. 16.50 - —
bbls., smaller lots 100 lbs. 17.50 -18.00
Potassium nitrate, NF, gran., bgs., 20-ton lots 100 lbs. 9.25 - —
bgs., smaller lots 100 lbs. 10.50 -11.00
NF, powd., bgs., 20-ton lots 100 lbs. 10.25 - —
bgs., smaller lots 100 lbs. 11.50 - 12.00
Potassium oxalate, neutral, tech., fine gran., bbls., dms. lb. .32 - .34
Potassium pentaborate, gran., bgs., c.l., works ton. 191.50 - —
dms. ton lots, ex whse ton. 302.00 - —
dms., smaller lots, ex whse ton. 307.00 - —
Powdered potassium pentaborate $10.25 per ton higher.

Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 - .20
Potassium permanganate, coml. kgs., works lb. .26 - .29
USP, dms., works lb. .29½- .31
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
Potassium silicate, electrical grade, 29° Be, 1:2.0, dms., l.c.l., 5 dms. or more, works, 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
dms., l.c.l. 5 dms. or more works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs. 6.10 - —
Potassium silicate, glass, bgs., c.l., works 100 lbs. 17.00 -17.30
bgs. l.c.l., works 100 lbs. 17.80 - —
Potassium silicate, soln., clarif., 29° Be, 1:2.5, dms., c.l., works, 100 lbs. 5.80 - —
dms., l.c.l., 5 dms. or more works 100 lbs. 6.55 - 6.95
tanks, works 100 lbs. 5.45 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld. E lb. .741 - .814
Potassium sulfate, agricultural, 50% K_2O, bulk, works, base price unit-ton. .64 - —
bulk, works, July forward. unit-ton. .67 - —
Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
gran., dms. lb. .18½- —
powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works, lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lot or less, works lb. .16¾- —
Potassium toluene sulfonate, dms., c.l. or t.l., works lb. .42 - —
dms., l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton. 13.45 - —
bulk, works, July forward ton. 14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., dms., c.l. lb. .42½- —
dms., 5,000-lb. lots lb. .43 - —
dms., smaller lots lb. .43½- .49
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works lb. .52½- .55
Potato starch (see Starch, potato).
Pregnenolone, bots. gram. .45 - —
Pregnenolone acetate, bots. gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.83 - —
dms., 100-500 lb. lots lb. 2.95 - 3.15
Progesterone, USP, bots., 100 gram lots gram. .50 - —
Progesterone acetate, bots. gram. .70 - —
Propane, indust., tanks, group 3. gal. .05 - —
tanks, New York harbor gal. .098 - —
Propionic acid, syn., pure, dms., c.l., works lb. .22¾- —
dms., l.c.l., works lb. .23¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd. lb. .15¾- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
n-Propyl gallate dms., 100 to 2,000-lb. lots works lb. 3.90 - 4.40
n-Propyl p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo. 55.00 - —
bots., smaller lots kilo. 55.10 -55.30
Propylene dichloride, consumers, dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0950- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in west 1c. higher same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18¼- —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
dms., l.c.l., dlvd. E lb. .19 - —
tanks, dlvd. E lb. .15½- —
Psyllium seed, black, bgs lb. .28 - .30
Blonde, bgs lb. .18 - —
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03½- .04¼
bgs., smaller lots lb. .03⅞- .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs ton. 56.00 - —
fine, bgs ton. No prices.
Pumpkin seed, bgs lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
Powd., 1.3% pyrethrins, bbls., works lb. .65 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal. 41.75 -42.75
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 10.00 - —
purif., 20% dms., works lb. 10.00 -10.10
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .24½- —

You get
best rust protection
from

There's more zinc phosphate on every rust-inhibited US Steel container—both inside and out. This extra protection gets your product to your customers cleaner, and keeps it that way longer, because US Steel's extra thickness of zinc phosphate guards against rust *even after the container is open.*

Profit from these 5 US Steel extras, too:

- **Widest container variety**—from 2½-gal. pails to 55-gal. drums, including stainless.
- **Eye-catching containers** — your containers not only ship your product, but advertise it, too — when color-decorated by US Steel.
- **Job-tailored fittings** — a wide selection of fittings to choose from, others available to order.
- **Prompt container delivery** — a 7-point factory system gives you next-door service anywhere — any time.
- **Longer container life**—extra rust protection allows more safe refillings per container.

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DIVISION
UNITED STATES STEEL CORPORATION
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
Los Angeles and Alameda, Calif. • Port Arthur, Texas
Chicago, Ill. • New Orleans, La. • Sharon, Pa. • Camden, N. J.

USS STEEL DRUMS

UNITED STATES STEEL

Pyrites, Canadian, 48-50% S, works, long-ton 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb dms lb 3.50 —
Pyroxylin scrap, shavings, amber, cs., works lb. No stocks
Shavings, mixed colors, dms., works lb. .11 —
translucent colors, dms., works. lb. .16 - —
translucent pastels, cs., works. lb. .14 - —
white, China, ivory, dms., works. lb. .16 - —
white, dense, opaque, dms., works lb .12 .15
unground, amber, dms. works lb .20 —
black, dms., works lb .12 - —
mixed, mottled, dms., works lb 13 - —
USP, bots lb 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd. 70% tannin, bgs., works lb. .16½- .17
Clarified, liq., 35% tannin, bbls., works lb. .08¼ .08½
Clarified, solid, 64% tannin, bgs., c.l., ex dock lb. .108713 —
Ordinary solid, 63% tannin, bgs., c.l., same basis lb. .099228 —
Quercitron extract cryst. No 1, bbls., l.c.l lb. .40 —
Liq. No. 1, bbls. l.c.l lb .19 —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 2.00 Nom.
Quinidine sulfate USP cns. 1,000-oz. lots oz. .74½- .75
Quinine, NF, cns., 100-oz. lots oz. .54 —
Quinine bisulfate, USP cns., 100-oz. lots oz. .28 - .29
Quinine hydrochloride cns. 1,000-oz. lots oz. .29 .31½
Quinine sulfate USP cns. 1,000-oz. lots oz. .28 - .29
Quinoline, dms., c.l. frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb. .88 - —
Powd., frt. alld. 100% basis lb. .98 - —
Rapeseed oil, tanks lb. .16 - —
Rare earth oxalate, 45-50%, bgs., works lb. 1.00 - —
Rauwolfia serpentina root powd., bbls., dms. lb. 1.50 - —
Red, carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

Red Pigments

Red pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

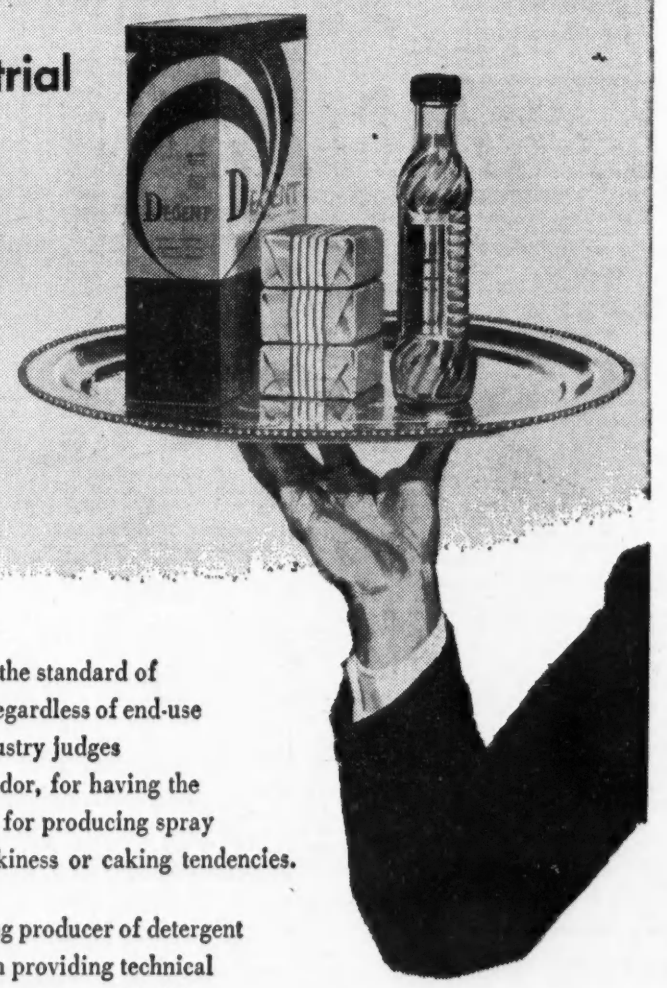
Red precipitate (see Mercuric oxide, red)
Red, saunders, NF, powd. bbls lb. .35 - .40
Reserpine, cryst., bots gram. 1.50 - 1.70
Resorcinol, tech. grade, dms., c.l., works, frt. equald lb. .77½- —
dms., l.c.l. same basis lb. .78½- —
USP, cryst., dms. works lb. 2.75 - —
powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 3.00 - 3.25
Rhatany root, bgs. lb. .15 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 5.80 - —
Tungstated, PTMA works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb. 37.00 -39.00
Rhubarb root, India, whole, bgs lb. .30 - —
Riboflavin, USP, fib, dms., kilo or more, dlvd kilo. 40.00 - —
USP, readily soluble, bots., dlvd. kilo .130.00 - —
Riboflavin, 5-phosphate-sodium, fib, dms., kilo or more, dlvd. kilo. 107.50 - —
Rice bran oil, clarif., dms., l.c.l. lb. .16 Nom.
Clarif., tanks, dlvd. E lb. .14 Nom.
Rice starch (see Starch, rice).
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots oz. 40.00 -47.50
Rosemary oil, Spanish, NF, cns., dms. lb. .90 - 1.35
Spanish, tech., cns., dms. lb. .50 - .90
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, unit-lb. .12 - —
resin, 25-45%, fib dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. .13375- —
Rue oil, bots. lb. 2.75 - 3.00
Rutin, NF, fib, dms., 10 kilo lots. kilo. 17.00 - —
fib, dms., 5 kilo lots kilo. 17.50 - —
fib, dms., 1 kilo kilo. 18.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls. lb. .30 - .32
Powd., bbls lb. .49 - .49½
Saccharin, calcium, fib, dms., 1,000-lb lots, works lb. 2.50 - —
Saccharin, USP, cryst., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms., smaller lots lb. 1.70 - 1.80
USP, powd., soluble insoluble, dms., 1,000-lb. lots lb. 1.65 - —
dms., smaller lots lb. 1.75 - 1.95
Safflower oil, dms., New York lb. .1785- .1835
tanks, same basis lb. .1585- —
Safrol, dms. lb. .85 - .90
Saffron Spanish USP, tins lb. 45.00 —
Sage, Greek, bgs lb. .14 - —
Dalmatian, cns. lb. .35 - .40
Italian, cns. lb. .18 - .20½
Sage oil, clary, bots lb. 25.00 -32.00
Dalmatian, cns. lb. 3.75 - 4.25
Spanish, cns. lb. 1.20 1.45
Sago flour, raw, bgs. lb. .07 .07¼
Refd., bgs. lb. .08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms. lb. 1.05 1.15
Salicylic acid, crude, fib, dms., c.l., t.l., frt. alld lb. .37¼- —
fib, dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech., fib, dms., c.l., t.l., dlvd lb. .39¼- —
fib, dms., l.c.l., dlvd lb. .43½- —
USP, cryst., 200-lb. fib, dms., 1,000 lbs. or more lb. .50½- —
less than 1,000 lbs lb. .53½- —
100 lb. fib. dms., 1,000 lbs. or more lb. .52½- —
less than 1,000 lbs. lb. .55½- —
USP, powd., 100 lb. fib. dms., 1,000 lbs. or more lb. .57½- —
less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls., kgs. lb. 1.20 —
Powdered salol, 25c per lb higher
Salt, rock, paper bgs., c.l. 100 lbs. 1.07½- —
Table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.32½- —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indian, chips bgs. .65 .66
East Indian, powd., fib. dms lb .75 .76
Sandalwood oil, cns. lb. 12.00 -12.50
Sardine oil, crude, tanks, Pac. coast. lb. No stocks.
Senega root, bls lb. 2.65 2.70
Sassafras oil, artif., dms. lb .50 .62
Nat., dom., dms lb. 1.90 - 2.10
Sassafras oil, Brazilian (see Ocotea cymbarum oil)
Savin oil, USP, cns. lb. 7.50 - —
Savory oil, cns lb 4.25 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 - —
Powd. bgs., frt. alld., 100% basis. lb. .95 —
Scopolamine hydrobromide, USP, bots oz. 13.00 -15.90
Sebacic acid, purif., dms., c.l., works lb. .69 —
dms., l.c.l., works lb. .71 .75
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fib dms. smaller lots lb. .31 .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.50 - —
Senna leaves, Alexandria, whole and half, bls lb. .19 —
siftings lb. .17 —
Tinnevelly, No. 1, bls lb. .19 - .20
No. 2, bls lb. .16 - .17
No. 3, bls lb. .14 - —
pods, bls lb. .22 - —
powd. bbls., bxs lb. .17 —
Serpentaria root, bls lb. 7.50 - 8.00
Sesame oil, USP dms. lb. 38 39
Sesame seed, Indian, nat., bgs. lb. No Prices.
Mediterranean, hulled, bgs lb. .21½- —
nat., bgs. lb. .17 —
Nicaraguan, hulled, shipt., bgs., lb. .27 - .28
nat., bgs. lb. .19 - —
Salvadorian, nat., bgs. lb. .19 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .48 —
bbls. 1,500-lb lots lb. .49 - —
kgs. 1,500-lb lots lb .50 - —
Bonedry shellac prices for less than 1,500 lb lots 1c. per lb higher for all packages.
Shellac bleached refd. bgs., 1,500 lb. lots lb. .58 —
bbls. 1,500-lb lots lb .59 —
kgs., 1,500-lb lots lb. .60 —
Orange lemon No 1 bgs., 10-bg. lots lb. .39 .41
lemon No 2, bgs., 10-bg. lots lb. .37 —
superfine, bgs., 10-bg. lots lb. .34 .35
TN, bgs. 10-bg lots lb .34 Nom.
Shellac in 1 to 10-bg lots 1c. per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06¼- .17¼
paper bgs. l.c.l. works lb. .06½- .17½
Raw, paper bgs., c.l., works lb. .06¼ .16¼
paper bgs. l.c.l. works lb. .06½- .16½
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton. 25.00 —
bgs. l.c.l. works, ex whse. ton. 45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l. works ton. 20.00 - —
bgs. l.c.l. works ton. 25.00 - —
99½%, 140 mesh bgs., c.l., works ton. 15.00 - —
bgs., l.c.l., works ton. 20.00 - —

The leaders use Oronite ALKANE* for highest quality syndets

- liquid or dry
- household or industrial
- continuous or batch processing
- oleum or SO_3



Oronite Alkane continues to remain the standard of quality in detergent raw materials, regardless of end-use or processing method. The soap industry judges Oronite Alkane best for color and odor, for having the least amount of unsulfonatable oils, for producing spray dried detergents with the least stickiness or caking tendencies.

Oronite is not only the world's leading producer of detergent raw materials, but is also foremost in providing technical assistance on detergent processing. Consistent with this, Oronite has just made available a new brochure on a continuous sulfonation-neutralization plant. For complete information just contact the Oronite office nearest you.

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EUROPEAN OFFICE
36, Avenue William-Favre, Geneva, Switzerland

*TRADEMARK FOR DETERGENT INTERMEDIATE

4377

Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .90 - —
Silver cyanide, bots., 1,000-oz. lots oz. .87½ -
bots., 500-oz. lots oz. .87⅝ - —
bots., 100-oz. lots oz. .87⅝ - —
Silver nitrate, CP, cryst., bots., 2,500-oz. lots oz. .62¼ - —
bots., 1,000-oz. lots oz. .63⅜ - —
bots., 500-oz. lots oz. .64 - —
bots., 250-oz. lots oz. .64½ - —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms. 1,000-oz. lots oz. 1.15 - —
Strong, NF bots. dms. 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns lb. 65.00 - —
Soapbark, crushed, bls lb. .38 - —
Powd., bls. lb. .40 - —
Whole, bls lb. .35 - —
Soda ash dense, 58%, paper bgs. c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.00 4.77
bulk, c.l., works 100 lbs. 1.60 —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.70 - —
Liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 3.00
73% sellers tanks, works, dry basis 100 lbs 3.00 —
Liq., 73%, rayon type, sellers' tanks, works, dry basis, 100 lbs. 3.00 - 3.10
Solid, 76%, dms., c.l., works, 100 lbs. 4.30 - —
Soda sal conc. bgs., c.l., works 100 lbs 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½ - —
bgs., l.c.l., same basis lb. .16½ - —
NF, 60%, gran. dms., c.l., works lb. .15½ - —
dms., l.c.l., works lb. .17½ - —
Sodium alginate, NF, white powd., dms., 300 lbs. or more lb. .93 - —
Sodium p-aminobenzoate dms., 1,000-lb. lots or more lb 2.33 - —
dms., smaller lots lb. 2.45 2.55
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 2.70 - —
Sodium antimoniate, bbls., c.l., dlvd. E lb. .28 - —
bbls., l.c.l., dlvd. E lb. .29½ - —
Sodium arsenate, 45% arsenic pentoxide, dms., c.l., works. lb. .12½ - —
dms., l.c.l., works lb. .13¾ - .14½
Sodium arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼ - —
dms., l.c.l., works lb. .13 - .14½
Soln. dms. works gal. .59 - .67
Sodium ascorbate, dms., 25-50 kilo lots kilo. 10.00 - —
dms., 10-kilo lots kilo. 10.35 - —
dms., 5-kilo lots kilo. 10.75 - —
dms., 1-kilo lots kilo. 11.00 - —
bots., 500-gram bots kilo. 11.50 - —
Sodium benzoate, tech., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, c.l., t.l., frt. alld lb. .38 - —
ton lots, same basis lb. .43 - —
1,000-lb. lots, same basis lb. .45 - —
Sodium bicarbonate USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works. 100 lbs. 2.55 - —
ogs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½ - .14¾
Sodium bifluoride bbls. c.l., works, frt. equald lb. .19½ - —
bbls., l.c.l., same basis lb. .1990 - —
Sodium bisulfate, bulk c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs. l.c.l. works 100 lbs 5.40 - —
Sodium bisulfite, soln., 35°, bbls., c.l., works 100 lbs. 1.70 - —
bbls., l.c.l. works 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium bromide USP bbls. works, lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda sal)
Sodium carbonate monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs. l.c.l. works 100 lbs 3.50 - —
Sodium carboxymethyl cellulose (see CMC)
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms. l.c.l., works lb. .09½ - .10½
Sodium chlorate in 100-lb. dms. only, ¼c. per lb. higher.
Sodium chloride tech. (see Salt).
Sodium chloride, USP gran. bgs. lb. .05 - —
Sodium chlorite tech. dms., c.l., works lb. .58 - —
dms. 20-ton lots or more works. lb. .66 - —
dms. smaller lots works lb. 70 - .73
Sodium chloroacetate tech., dms., c.l. works lb. .27 - —
dms. l.c.l. works lb. .28 - —
Sodium chromate, anhyd., fib dms., c.l. t.l. works lb. .14¾ - —
fib dms. l.c.l. works lb. .15¼ - .16½
Tetrahydrate bgs. c.l. t.l. works, lb. .1015 - —
bgs. l.c.l. lb. .1065 - .1190
Sodium citrate anhyd. dms lb. .62 - —
NF VIII, gran. dms lb. .26½ - .27½
USP XIV gran. dms lb. .29½ - .30½
Sodium citrate USP powd prices ½c higher
Sodium cyanide, flake, 96-98%, dms., c.l or 20,000-lb lots lb .193 - —
dms., over 1,000-lb. lots lb .203 - —
dms., 100-lb to 1,000-lb lots. lb. .213 - —
Gran. sodium cyanide 1c higher.
Sodium cyanate dms. 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 1.10
Sodium diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 - —
250-lb. dms. l.c.l. works lb. .15¾ - —
Anhyd., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .18¾ - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½ - —
bgs., smaller lots lb. .14 - —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390 - —
fib. dms., l.c.l., works, frt. equald lb. .1430 - —
Sodium formate, bgs. c.l. works. 100 lbs 7.00 - —
bgs. l.c.l., works 100 lbs 8.65 - —
Sodium gentisate 100-lb. fib dms. lb 5.50 - —
Sodium gluconate, refd., dms. lb. .84 - —
Tech., dms., bgs. lb. .37¼ - .38¼
Sodium hydride powd. dms. works. lb. 1.90 - 2.75
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite dms. c.l., frt. alld lb. .23¾ - —
dms., l.c.l., frt. alld lb. .24¾ - —
Sodium hydroxide, NF, pellets 100-lb dms. 1 to 100-dm lots. lb. .23½ - .28
Sodium hydroxide tech (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb lots lb. .97 - —
Sodium hyposulfite, anhyd. photo grade bgs. c.l., works. 100 lbs. 8.05 - —
bgs. l.c.l. works 100 lbs 8.45 - —
Sodium hyposulfite, annyd., tech., bgs., c.l., works 100 lbs. 7.25 - —
bgs. l.c.l. works lb 100 lbs. 7.65 - —
Hexahydrate, pea cryst. bgs. c.l., works 100 lbs. 5.15 - —
bgs. l.c.l. works 100 lbs. 5.55 - —
photo grade bgs. c.l. works. 100 lbs. 7.75 - —
bgs., l.c.l. works 100 lbs 8.05 - —
Pentahydrate, tech., bgs., c.l., works 100 lbs. 5.15 - —
bgs. l.c.l. works 100 lbs 5.55 - —
Sodium iodide, USP, bots., dms lb. 2.42 - 2.54
Sodium lactate, edible, 60%, cbys., dms. works lb. .26½ - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .19½ - .20¾
tanks, dlvd lb. .18 - —
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate, octahydrate, gran., bgs., c.l., works ton 87.00 - —
bgs., ton lots, ex whse ton 143.00 - —
bgs., smaller lots, ex wnse. ton 148.00 - —
Tetrahydrate, dms., c.l., works ton 204.00 - —
dms., ton lots, ex whse ton 242.50 - —
dms., smaller lots ex whse ton 247.50 - —
Sodium, metallic, bricks 14,000-lb. lots or more works lb. .19½ - —
Fused, 14,000-lb lots or more, works lb. .19 - —
tanks, works lb. .17 - —
Sodium metanilate bbls. frt. alld. lb. .62 - —
Sodium metasilicate anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs. c.l. works 100 lbs 4.45 - —
bgs., l.c.l. works 100 lbs. 4.80 - 6.75
dms., c.l., works 100 lbs. 4.95 —
dms., l.c.l. works 100 lbs. 5.30 - 7.25
Sodium molybdate anhyd., dms., works frt equald lb. .92 .96
Cryst. dms. works frt alld lb. .73 .74
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate bbls lb .70 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton. 48.75 - —
bulk, c.l., works ton. 45.25 - —
Sodium nitrate, imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse. ton. 49.75 - —
bulk, c.l., same basis ton. 46.25 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs. 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs 6.70 - —
dms., l.c.l., works 100 lbs 7.05 - 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs 7.60 7.90
Sodium oxalate, 88% bgs., works. 100 lbs. 12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, bgs., c.l. works, frt. equald lb. .26 - —
bgs., l.c.l., same basis lb. .27½ - .34
Pellets, bgs., c.l., same basis lb. .26 - —
bgs., l.c.l., same basis lb. .27½ - .34
Sodium pentachlorophenate, powd., bgs., dms., c.l., same basis lb. .25 - —
bgs. dms., l.c.l. same basis lb. .26½ .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.
Sodium perborate, NF, tech., bgs., c.l., works lb. .19 - —
bgs., l.c.l., works lb. .21 - —
Sodium peroxide dms c.l., t.l., dlvd. E of Miss lb. .20½ - —
dms., l.c.l. same basis lb. .21 - .21½
Sodium phenolsulfonate, USP IX, gran. dms lb. .48 - .49
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt equald. 100 lbs. 7.95 - —
bgs., l.c.l., same basis. 100 lbs. 8.45 - 8.95
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
Dibasic, USP, dried powd bgs., dms., works lb .19 - .20½
Monobasic anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., same basis. 100 lbs. 9.40 - 10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.05 - —
bgs., l.c.l., frt. equald. 100 lbs. 9.45 - 10.05
Tribasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.60 - —
bgs., l.c.l., frt equald. 100 lbs. 5.00 - 5.50
Sodium phosphate in dms. 60c to 80c higher than bgs
Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald. 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.35 - 12.35
Ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.81 - —
bgs., l.c.l., same basis. 100 lbs. 9.21 - 9.71
Sodium salicylate, 1,000 lbs. or more USP, dms lb. .78½ - —
less than 1,000 lbs., dms lb. .81½ - —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs 4.10 4.35
bgs., l.c.l., dlvd. zone 2 100 lbs 4.35 4.60
dlvd. zone 3 100 lbs. 4.75 - 4.90
dlvd. Zone 4 100 lbs. 5.35 - 5.60

Sales zones are: (1) Atl. states E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs 5.00 - —
bgs., 6,000-19,900 lb. lots, works, 100 lbs. 5.35 - —
dms. c.l., works 100 lbs 5.50 - —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be. 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.55 - —
dms., l.c.l., works 100 lbs 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47°Be. turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.00
tanks, works 100 lbs. 1.90 - —
52° Be. turbid, 1:2.4, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton. 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .069 - —
Sodium silicofluoride in dms. 0.4c. per lb. higher.
Sodium stannate, dms. works, frt. alld. E lb. .593 - .652
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½ - —
Tech., anhyd., bgs., c.l. dlvd. E. ton. 52.00 - —
detergent, rayon grade, bgs., c.l., works ton. 34.00 - —
bulk, c.l., works ton. 31.00 - —
USP, cryst., fib. dms lb. .17½ - .18
gran., fib. dms lb. .17½ - .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald, lb. .07¼ - —
dms., l.c.l., same basis lb. .08¼ - —
Liq., 40-44%, tanks, works, 100% basis ton. 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½ - —
bbls., l.c.l., same basis lb. .06½ - —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs. 7.55 - —
bgs., l.c.l. same basis 100 lbs. 7.95 - —
Tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs. t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½ - —
dms., l.c.l., same basis lb. .05½ - —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech. anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½ - —
Sodium thiosulfate, tech. (see Sodium hyposulfite).
Sodium titanate, etns., c.l., works. lb. .14¼ - —
etns., 5-ton lots, works lb. .14½ - —
etns., 1-ton or less, works lb. .14¾ - —
Sodium toluene sulfonate, dms., c.l. or t.l lb. .38 - —
dms., l.c.l. lb. .42 - —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld E. lb. .37½ - —
100-lb. dms., l.c.l., frt. adjusted, E lb. .39½ - —
50-lb. dms., c.l., frt. alld. E lb. .38 - —
50-lb. dms., l.c.l., frt. adjusted, E lb. .40 - —
10-lb. cns., c.l., frt. alld E lb. .44 - —
10-lb. cns., l.c.l., frt. adjusted, E lb. .46 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.16 - —
bgs., l.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 - —
bgs., l.c.l., works 100 lbs. 9.70 - 10.10
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs. 10.20 - 10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½ - —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .35
Solvent naphtha, petroleum, partial aromatic, 205°-282°F. b.r., 38°C. m.a.p., tanks, New Jersey gal. .24 - —
211°-277°F. b.r., 25.6°C. m.a.p., tanks, New York, New Jersey gal. .28 - —
212°-293°F. b.r., 38°C. m.a.p., tanks, Philadelphia gal. .24 - —
224°-280°F. b.r., 48°C. m.a.p., tanks, Houston gal. .215 - —
266°-374°F. b.r. 28°C. m.a.p., tanks, Philadelphia gal. .27 - —
282°-325°F. b.r., 41.6°C. m.a.p. tanks, Houston gal. .25 - —
284°-383°F. b.r., 35°C. m.a.p., tanks, Philadelphia gal. .27 - —
312°-365°F. b.r., 17.2°C. m.a.p. tanks, New Jersey gal. .345 - —
315°-350°F. b.r., 17.2°C. m.a.p., tanks, Texas City gal. .35 - —
Solvent naphtha, petroleum, partial aromatic, 322°-351°F. b.r., 15°C. m.a.p., tanks, Baytown, Texas gal. .33 - —
324°-349°F. b.r., 19°C. m.a.p., tanks, Houston gal. .33 - —
334°-392°F. b.r., 19°C. m.a.p., tanks, Philadelphia gal. .25 - —
352°-413°F. b.r., 36°C. m.a.p., tanks, Houston gal. .33 - —
358°-401°F. b.r., 24.4°C. m.a.p., tanks, New Jersey gal. .38 - —
365°-404°F. b.r., 19°C. m.a.p., tanks, New Jersey gal. .43 - —
367°-421°F. b.r., 20°C. m.a.p., tanks, Baytown, Texas gal. .33 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .34 - —
fib dms., smaller lots, works lb. .37 - .39
Sorbitan tristearate, fib dms., 20,000-lb lots, works lb. .33 - —
Sorbitan tristearate fib dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib dms., smaller lots, works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works. lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works. lb. .38 - .39
Sorbitol, soln., coml., aqueous, dms., c.l., works lb. .24¼ - —
dms. ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼ - —
tanks, works lb. .23¼ - —
NF, reg., 70% aqeous dms., c.l., works lb. .16 - —
dms. ton lots, works lb. .16¾ - —
dms., smaller lots works lb. .17 - —
tanks, works lb. .15 - —
Soybean meal, 44% bulk, Decatur lb. 44.50 - 45.00
Soybean oil, crude, tanks, Decatur. lb. .11¼ - —
Foots, soapstock, acid 95%, tanks, N. Y. lb. .06¾ - —
Soybean oil, refd., alkali, dms. lb. .1628 - .1648
tanks lb. .1428 - —
clarified, dms. lb. .1578 - .1598
tanks lb. .1378 - —
Salad, dms. lb. .16⅞ - .17⅛
tanks lb. .14⅞ - —
Soybean oil acids, dbl. dist., dms. lb. .19 - .21½
tanks lb. .16½ - —
Single-distilled, dms. lb. .17¾ - .20¼
tanks lb. .15¼ - —
Soybean pitch, dms., works lb. .05 .05¼
Soybean protein, chemically isolated, bgs., c.l., works lb. .23 - —
Mechanically refd., bgs., l.c.l., works lb. .066 —
Sparteine sulfate, cns. oz. .80 .90
Spearmint leaves, dom., bls lb. .75 - —
Spearmint oil, dms lb. 3.90 - 4.50
Sperm oil, bleached, winter, 45°, dms lb. .1825 - .1850
tanks lb. .1650 - —
Nat., winter, 45°, dms. lb. .1725 - .1750
tanks lb. .1550 - —
Spermaceti wax, blocks, cs lb. .31 - .34
Cakes, cs lb. .32 - .34
Spruce extract, liq., reg. tanks, works lb. .01¾ —
Powd., super, bgs., c.l., works. lb. .05¼ - —
bgs., l.c.l., works lb. .05½ - —
Spruce oil, cns., dms. lb. 2.10 - 3.50
Squill, white, bls. lb. .16 - .18
White, powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .752 - .762
Stannic oxide, dms., dlvd. E lb. .995 - 1.005
Stannous chloride, anhyd., dms., works lb. .946 - 1.440
Hydrous, cryst., dms., works lb. .82⅜ - .83⅜
Stannous sulfate, dms., works lb. 1.004 - 1.024
Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.36 - —
paper bgs., l.c.l 100 lbs. 7.51 - —
Starch, corn, powd., paper bgs., c.l. 100 lbs. 7.48 - —
paper bgs., l.c.l 100 lbs. 7.63 - —

Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.

Starch, potato, dom., Idaho, bgs., c.l., works lb. .06½ - —
Dom., Maine, bgs., c.l., works lb. .06¼ - —
bgs., ex whse, New York lb. .08¼ - .09¼
Starch, rice, bgs., ex whse lb. .14 - .15
Starch, wheat, bgs. lb. .08½ - .09
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs lb. .60 .61
Stearic acid, dbl. pressed bgs lb. .17 - .19½
Single-pressed, bgs. lb. .16½ - .19
Triple pressed, bgs. lb. .19¼ - .21¾
Stearine, oleo (see Oleostearine).
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania, gal. .16 - —
tanks, group 3 gal. .13375 - —
tankwagon, Boston gal. .20 - —
Chicago gal. .299 - —
Cleveland gal. .23½ - —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½ - —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs. lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .0850 - .0875
Streptomycin sulfate, bulk gram. .0850 - .0875
Strontium bromide, NF, cryst., 150-lb. fib. dms lb. .84 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works. lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, bbls., works. lb. .46 - —
Strontium iodide, jars, 25-lb. lots. lb. 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs. 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton. 56.70 - 66.15
Strophanthin G (see Ouabain, USP)
Strophanthin K, bots oz. 25.00 - 35.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax, USP, cs lb. 1.00 - 1.50
Styrene monomer, polymer grade, 99.6% dms., c.l., frt. alld. lb. .18½ - —
dms., l.c.l., same basis lb. .20½ - —
tanks, same basis lb. .16 - —
Syn. rubber grade, 99% tanks, bulk, contract lb. .1247 - —
c.l., t.l., same basis lb. .15 - —
l.c.l., same basis lb. .17 - —

Above contract prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots. lb. 1.25 - 1.45
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs., refy., E lb. .0833- —
Sucrose octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .84 - —
Sugar (see Sucrose).
Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works lb. .65 - .75
80-lb. ctns., spot lb. .67¼- .72¼
Sulfabenzamide, dms. kilo. 8.80 - 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 -10.10
Sulfacetamide, USP, fib. dms. kilo. 7.70 - 8.80
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.25
Sulfadiazine, USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms kilo.22.60 -23.70
Sulfadiazine-sodium, USP, dms.kilo.24.80 -25.90
Sulfaguanidine, NF X, dms kilo. 5.50 - 6.60
Sulfamerazine, USP, microcrystals, dms kilo.23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 -25.90
Sulfamethazine, microcrystals, USP XV, dms kilo.19.65 -20.75
Powd., dms kilo.18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 - —
dms., l.c.l., t.l., works 100 lbs.17.50 -18.50
Sulfanilamide, NF X, 30-80 mesh, dms kilo. 3.05 - 3.50
NF X, microcrystals, dms kilo. 3.79 - 4.20
powd., dms kilo. 2.85 - 3.30
Sulfanilamide quinoxaline, veterinary, dms kilo.14.12 -14.85
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo.15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo.16.55 -17.65
Sulfathiazole, NF X, powd., dms. kilo. 5.50 - 5.85
microcrystals, dms. kilo. 6.25 - 6.60
Sulfathiazole-sodium, NF X, dms.kilo. 6.05 - 6.40
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.30 - —
Coml., lump, bgs., mines 100 lbs. 2.35 - —
bbls., mines 100 lbs. 2.90 - —
Crude, dom., bright, bulk, f.o.b. cars, mines long-ton.23.50 - —
Crude, dom., bright, bulk, export, f.o.b. vessels Gulf ports, long-ton.25.00 - —
Crude, dom., bright, bulk, US and Canada, f.o.b. vessels Gulf ports, long-ton.25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower.
Sulfur, crude, bulk, imp., Mexican, filtered, f.o.b. vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.15 - —
bbls., mines 100 lbs. 6.50 - —
Refd., flour, light, bgs., mines, 100 lbs. 4.75 - —
bbls., mines 100 lbs. 5.75 - —
lump, bgs., mines 100 lbs. 4.45 - —
rolls, bgs., mines 100 lbs. 5.00 - —
bbls., mines 100 lbs. 5.75 - —
Sulfur, refd., salt block, bgs., mines, 100 lbs. 4.65 - —
virgin block, bbls., mines, 100 lbs. 4.70 - —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —
Sulfur, rubbermakers, 98-100%, passing through 325 mesh, mines, 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.90 - —
Sulfur, rubbermakers, refd., bgs., mines 100 lbs. 4.40 - —
bbls., mines 100 lbs. 5.55 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.85 - —
bbls., mines 100 lbs. 4.10 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .04½- —
ret. dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Refrigeration, 150-lb. cyls., dlvd. lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½- —
Sulfur monochloride, 55-gal. non-ret. dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.45 - —
tanks, works ton.18.60 - —
Sulfuric acid, 66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton.22.35 - —
98%, tanks, works ton.23.50 - —
99-100%, tanks, works ton.23.95 - —
Sulfuric acid, CP, NF, consumers' cbys, c.l. frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots. extra, cs., l.c.l., same basis lb. .18¼- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works ton.29.00 - —
65%, tanks, works ton.39.50 - —
Sumac leaves, 28% tannin, bgs., ex dock ton.135.00 Nom.
28% tannin, grd., bgs., ex dock ton.130.00 Nom.
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton. .90 - .93
bulk, c.l. Carteret, N. J. unit-ton. .90 - .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .98 - —
Sweet birch oil, USP, northern, ens lb. 4.25 - 9.50
USP, southern, ens. lb. 2.30 - 2.75

T

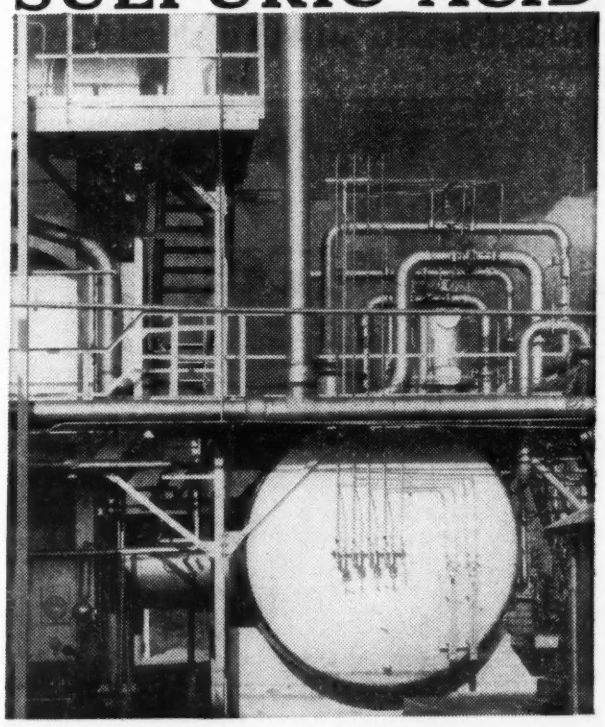
2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T Isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, New York, grd., bgs., c.l., works ton.28.00 - —
bgs., l.c.l., works ton.31.00 -36.00
Dom., fibrous, New York, 99.5%, 325 mesh, bgs. c.l., works. ton.31.00 - —
bgs., l.c.l., works ton.34.00 - —
99.95% micronized, bgs., works. ton.38.00 - —

Talc, dom., ord., Calif., grad., bgs., c.l., works ton.33.00 -39.50
ord., Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04½- —
tanks, works lb. .02½- .03
Dist., dms., c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .06½- —
Refd., dms., c.l., works lb. .06¾- —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06
Tall oil acids, dms., c.l., works lb. .10½- .12
dms., l.c.l. lb. .11 - .12½
tanks, works lb. .08½- .10
Tall pitch, dms., c.l., works ton.50.00 -70.00
tanks, works ton.30.00 -40.00
Tallow, edible, tanks, dlvd. lb. .11½- .11¾
inedible, fancy, bleachable, tanks, dlvd. lb. .08½- .08⅝
fancy, guaranteed, dms., f.a.s. lb. .09¾- .09⅞
No. 1, tanks, dlvd. lb. .08 - —
prime, tanks, dlvd. lb. .08¼- .08⅜
Special, tanks, dlvd. lb. .08¼- —
sulfonated, 25%, bbls., l.c.l. lb. .08¾- .09¼
50%, bbls., l.c.l. lb. .10 - .10½
Tallow acids, dist., dms. lb. .16¼- .18¾
tanks lb. .13¾- —
Hydrogenated, dms. lb. .15½- .18
Tallow oil, acidless, dms., c.l. lb. .14½- —
dms., l.c.l. lb. .15½- .17
Tangerine oil, Floridian, dms. lb. 2.00 2.80
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 4.75 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton. 5.50 - —

Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 2.01
Tech., dms. lb. 1.05 - —
Tansy oil, dms. lb. 7.50 - 9.50
Tapioca flour, Brazilian, bgs., ex whse lb. .12 - .13½
Siamese, first quality, same basis, lb. .07 - .07½
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, dom., USP, 230 or 250-lb dms., c.l lb. .49 - —
230 or 250-lb. dms., 10,000-lb. lots, 1 shipt lb. .49½- —
230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb. dms. lb. .51 - —
Imp., bgs. lb. .40 - .44
Terpine glycol ether, dms., c.l., works lb. .23½- —
dms., l.c.l., works lb. .25½- —
tanks, works lb. .22 - —

Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. 70 —
Terpineol, dms., l.c.l., dlvd. E lb. .23¾- —
Extra, dms. lb. .41 .60
Prime, dms. lb. .30 .45
Terpinyl acetate, extra, cns., dms. lb. 60 75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms. lb. 1.75 3.00
Terra alba (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. .70 - —
Testosterone proprionate, USP, 100-gram lots, gram lots, bots, gram. .68 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 .23¼
Tetraethyl orthosilicate dms., c.l., dlvd. E lb. .61½- —
dms., l.c.l., dlvd. E lb. .62½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E lb. .54½- —
tanks, dlvd. E lb. .51 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —

SULFURIC ACID



Ammonia
Ammonium Nitrate
Bicarbonate of Soda
Carbon Dioxide
Caustic Potash
Caustic Soda
Chlorine
Ethylene Diamine
Formaldehyde
Hexamine
Hydrazine and Derivatives
Hypochlorite Products
Methanol
Muriatic Acid
Nitric Acid
Polyamines
Soda Ash
Sodium Chlorite Products
Sodium Methylate
Sodium Nitrate
Sulfate of Alumina
Sulfur (Processed)
Sulfuric Acid

Dependability? Six shipping points assure it. Where? Baltimore, Md., Little Rock, Ark., Bossier City, La., Beaumont, Port Arthur, and Pasadena, Tex. Seven commercial grades: 60° Be., 66° Be., 98%, 99%, 100% H_2SO_4, 20% Oleum (104.5% H_2SO_4), and 25% Oleum (105.63% H_2SO_4). All plants ship in tank cars and tank trucks; barge shipments from Baltimore. More information? Waste acid disposal problems? Call today.

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Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .34½- —
dms., l.c.l., l.t.l., Memphis, Tenn. lb. .35½- —
dms., c.l., t.l., Newark, N. J lb. .36½- —
dms., l.c.l., l.t.l., Newark, N. J lb. .37½- —
tanks, dlvd. E. of Denver lb. .34 - —
tanks, dlvd. W of Denver lb. .35 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd. lb 12.50 -15.00
Thallium sulfate, 99%, bots, dlvd lb 8.00 -13.00
Theobromine, NF, fib, dms lb 4.50 —
Theobromine and sodium acetate, USP, fib, dms lb 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb 3.90 - —
Theophylline, anhyd., or USP, 100-lb. dms lb 3.65 - —
Thiamin hydrochloride, USP, reg., fib. dms kilo.40.00 - —
USP, ampule grade fib. dms.kilo.42.00 - —
Thiamin mononitrate, USP, fib. dms kilo.40.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.10 - —
Tungstated, PTMA, kgs., works. lb. 6.40 - —

Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Thiourea, tech, bgs, t.l., frt. alld. lb. .33 - —
bgs., l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, bots., 1-kilo lots.kilo.450.00 -500.00
Thyme leaves, French, bgs lb. .26 - —
Spanish, bgs. lb. .14 - —
Thyme oil, NF, red, cns., dms lb. 2.10 - —
white, cns lb. 2.20 - —
Tech., white, cns lb. .40 1.85
Thymol, fib. dms lb. 2.60 3.00
Thymol iodide NF, dms. lb. 7.30 - —
Timbo root, (see Cube root).
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. .91¾- —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd (see Stannic chloride, anhyd.).
Titanium pigment calcium-rutile base, reg. bgs., c.l., dlvd. lb. .09¼- —
bgs., l.c.l., works lb. .09¾- —
Calcium-rutile base, high-tinting, dms., c.l lb. .09 - —
dms., l.c.l lb. .09½- —

Titanium dioxide, anatase, chalk-resistant, bgs., c.l., dlvd. lb. .25¼- —
bgs., l.c.l., dlvd lb. .26½- —
Anatase, ceramic, bgs., c.l., dlvd. lb. .23½- —
bgs., l.c.l., dlvd lb. .24½- —
reg., bgs., c.l., dlvd lb. .23½- —
bgs., l.c.l., dlvd lb. .24½- —
granular, nat., bgs., c.l., f.o.b. Jacksonville, Fla ton.180.00 - —
5 ton lots, Niagara Falls, N. Y. ton.205.00 - —
bgs., ton lots, same basis. ton.215.00 - —
Rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
Tungstated, PTMA, bbls. lb. 5.55 - —
bgs., l.c.l., dlvd. E lb. .28½- —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, bbls., frt. alld lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis, bots. kilo.91.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.166.00 - —
d-a-Tocopheryl acid succinate, cryst. bots kilo.148.00 - —
dl-a-Tocopherol, bots kilo.134.20 - —
dl-a-Tocopheryl acetate, bots. kilo.122.00 - —
25% dry, powd., bots kilo.30.50 -32.00
o-Tolidine base, dry, kgs., 100% basis lb. 1.40 - —
Paste, kgs., 100% basis lb. 1.35 - —

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OIL SOLUBLE (*Vegetable oil carriers*)

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Toluol

Toluol quotations, both coaltar and petroleum, may now be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.35 - —
Tolu balsam, cns. lb. 4.25 - 4.75
Toluene, coaltar, inqust. or nitration, tanks, works:—
Bethlehem, Pa. gal. .29½- —
Birmingham, dist. gal. .29½- —
Chicago, dist. gal. .29½- —
Cleveland, dist. gal. .29½- —
Geneva, Utah gal. .26 - —
Johnstown, Pa. gal. .29½- —
Lackawanna, N. Y. gal. .29½- —
Lone Star, Tex. gal. .29¼- —
Lorain, Ohio gal. .29½- —
Middletown, Ohio gal. .31 - —
Minnequa, Colo gal. .32 - —
Philadelphia, dist. gal. .29½- —
Pittsburgh, dist. gal. .29½- —
Sparrow's Point, Md. gal. .29½- —
Terre Haute, Ind. gal. .29½- —
Youngstown, Ohio gal. .29½- —
Toluene, petroleum indust., 2° tanks, works:—
Albany, N. Y. gal. .32 - —
Bayonne, N. J. gal. .31 - —
Baytown, Tex. gal. .29¼- —
Chicago, Ill. gal. .29½- —
Detroit, Mich. gal. .31 - —
Houston, Tex. gal. .29¼- —
Philadelphia, Pa. gal. .31 - —
Providence, R. I. gal. .32 - —
Wood River, Ill. gal. .32 - —
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
p-Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid, monohydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
dms., l.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
Solid, dms., frt. alld lb. .60 - .61
o-Toluidine-m-sulfonic acid, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic acid, bbls., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld lb. .97 - —
fib. dms., l.c.l., frt. alld lb. 1.00 - —
Powd., fib. dms., same basis lb. 1.00 - —
Tonka beans, Angostura, cks lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —
Totaquine 100-oz. tots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works lb. .22 - —
dms., l.c.l., l.t.l., works lb. .23 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.25 - 4.50
No. 2, cs. lb. 3.40 - —
No. 3, cs. lb. 3.00 - 3.10
USP, powd., bbls. lb. 1.25 - 1.38
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42½- —
non-ret. dms., l.c.l., frt. alld E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works lb. .52½- —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .68½- —
tanks, same basis lb. .65 - —
Trichloroacetic acid, bots lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .15 - —
dms., l.c.l., frt. alld E. lb. .16 - —
tanks, frt. alld E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .17¾- —
tanks, dlvd. lb. .13¾- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms., l.c.l., frt. alld lb. .15 - .16¾
tanks, works, frt equald lb. .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate 65% soln. ret. cbys, works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .34½- —
dms., l.c.l., dlvd. lb. .35½- —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., dlvd. lb. .26½- —
dms., l.c.l., dlvd. lb. .27½- —
tanks, dlvd. lb. .24 - —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., l.c.l., same basis lb. .25½- —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works; dlvd. E lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld E. of Denver lb. .45¾- —
non-ret. dms., l.c.l. frt alld. E. of Denver lb. .46¾- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd E. lb. .52½- —
tanks, dlvd E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .24½- —
dms., l.c.l., dlvd. E lb. .25½- —
tanks, dlvd E lb. .22 - —
Trimethylamine, 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .35 - —
Trimethylamine, 25-40% soln dms., l.c.l., works, frt. equald, 100% basis lb. .35½- —
tanks, works, frt. equald, 100% basis lb. .28 - —

Trioxane, pure, dms. c.l., t.l., works, lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., l.c.l., dlvd, E. lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 - —
bbls., l.c.l., frt. equald lb. .41 - —
Triphenylguanidine, bbls. works lb. .90 - —
tanks, same basis lb. .18½- —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .21 - —
dms., l.c.l., l.t.l., frt. alld E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .18½- —
tankwagons and compartmented tankwagons, 1,000 gals. min. frt. alld E lb. .19 - —
Tripropylene glycol prices 1c per lb higher in West
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, fib ctns. works, lb. 75 00 - —
Tung oil, dms., c.l., New York lb. .25¼- —
dms., l.c.l., same basis lb. .25½- .25¾
tanks, New York lb. .23¾- —
tanks, domestic, mills lb. .22 - —
Tungsten metal powd 2-5 microns, dms. works lb. 4.10 - 4.20
Tungstic acid tech. dms. 1,000-lb. lots, works lb 3.00 - —
dms. smaller lots works lb 3.15 - 3.50
Tuscan red bbls. frt equald lb. .26 - .32
Turkey red bbls. works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF ctns dms lb. .28 - .43
Tyrothricin USP gram. .55 - .58

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. N. of Tenn. and N. C. E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .35 - .39½
Ultramarine blue, jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .33
Ultramarine blue dlvd. prices ½c. higher Ala., Fla., Ga., La., (Shreveport 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald with Chicago
Umber pigment, burnt, American, bgs. c.l. works lb. .07 - .07¾
bgs. l.c.l. works lb. .07¼- .08
Umber pigments, burnt, Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾- —
Raw, American, bgs. works lb. .07½- .08¼
Turkey-type, bgs. works lb. .06¾- .07
Undecylenic acid, dms. lb. 1.45 - —
Unicorn root, false (see Helonias root)
Unicorn root, true (see Aletris root).
Urea, 46% N, indust. bgs., c.l., t.l., dlvd. E ton. 125.00 - —
bgs., l.c.l. dlvd E. ex whse. ton. 145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton. 110.00 - —
Urea-ammonia liquor A and B grades, N basis, tanks, Belle W Va ton. 126.00 - —
C grade, tanks, same basis ton. 124.50 - —
37 grade tanks, same basis ton. 153.00 - —
Urethane USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls. lb. .17 - .19

V

Valerian root, Belgian, bgs. lb. .35 - —
Indian, bgs lb. .29 - —
Valonia beards, 40-42% tannin, bgs., ex dock ton. 95.00 Nom.
Victoria blue toner, bbls., prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Valonia cups, 28-30% tannin, bgs., ex dock ton. 73.00 - —
Valonia extract, powd., 63% tannin, bgs., ex dock lb. .11 - —
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vandyke brown, bbls., works lb .09½- .12
Vanilla beans, Bourbon, tins lb 8.35 - 8.75
Mexican, cuts, tins lb. 7.75 - —
whole, tins lb. 8.25 - 8.50
Tahiti, cs. lb. 7.00 - —
Vanillin, ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more lb. 2.85 - 3.10
100-lb fib dms., smaller lots. lb. 2.95 - 3.10
Venetian red, jobbing, bgs., works, lb. .0475- —
20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625- —
40%, bgs., works lb .0675- —
Vetiver oil, Bourbon, cns lb. 13.00 -13.75
Haitian, cs. lb. 11.00 -11.50
Java, cns lb. 11.75 -12.25
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.50 - —
Vinyl acetate monomer, Zone 1, 55-gal. dms., c.l., dlvd lb. .20 - —
55-gal. dms., l.c.l., dlvd lb. .21 - —
tanks, dlvd lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms., c.l., dlvd lb. .21 - —
55-gal. dms., l.c.l., dlvd lb. .24 - —
tanks, dlvd lb. .18½- —
tanktrucks less than 4,000 gals., dlvd lb. .19 - —
Zone 1 is all continental U. S. except Zone 2. Zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .35 - —
Vinyl chloride monomer, tanks, works lb. .11 - .19
Vinyl ether, tech., dms., c.l., works. lb. .26 - —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
USP, anesthesia, bots., 50cc. hospitals bot. 1.12 - —
USP, anesthesia, bots., 75cc. hospitals bot. 1.56 - —
Vinyl ethyl ether, tech., dms., works lb. .30 - —
Vinyl isobutyl ether, tech., dms., l.c.l., works lb. .38 - —
Vinyl methyl ether, cyls., works lb .30 - —
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.
Vinyl propionate, monomer, dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis lb .50 - —
tanks, same basis lb .47 - —
Vinyl trichloride (see Trichloroethane)
2-Vinylpyridine, 10 dms to tanks, works lb. 1.34 - —
1 to 9 dms., works lb. 1.48 - —
tanks, works lb. 1.31 - —
Vinyltoluene, dms., c.l., frt. alld lb. .18½- —
dms., l.c.l., frt. alld lb. .19½- —
tanks frt alld lb. .16 - —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½- —
Virginia type red, bbls. works lb 1.40 - —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo. 67.50 - —
dry, 325,000 units per gram, same basis kilo. 43.88 - —
dry, 250,000 units per gram, same basis kilo. 33.75 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin A, palmitate, liq. 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
Liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
gram. 215.00 - —
Oral grade solids, in containers of 1 and 10 grams of B_{12} activity. gram. 175.00 - —
0.1 percent triturations of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 247.00 - —
Vitamin C (see Ascorbic acid).
Vitamin B_{12}, cryst., 1-10 gram vials.
Vitamin D (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo. 42.50 - —
850,000 units per gram less than kilo lots kilo. 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin G (see Riboflavin)
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root, bark, bls. lb. 2.10 - —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb 1.95 - —
dms. 25-49-lb lots, New York or Chicago lb 2.05 - —
cns., 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds, bbls lb 1.95 —
Wattle bark, fair average, African, bls., ex dock ton. 80.00 - —
Merchantable, bls., ex dock ton. 74.50 - —
Wattle extract, liq., 35% tannin, bbls. lb .08¼ .08½
Solid, East Africa, 60% tannin, bgs., ex dock lb. .08275- —
Solid, South Africa, 60% tannin, bgs. ex dock lb. .0849- —

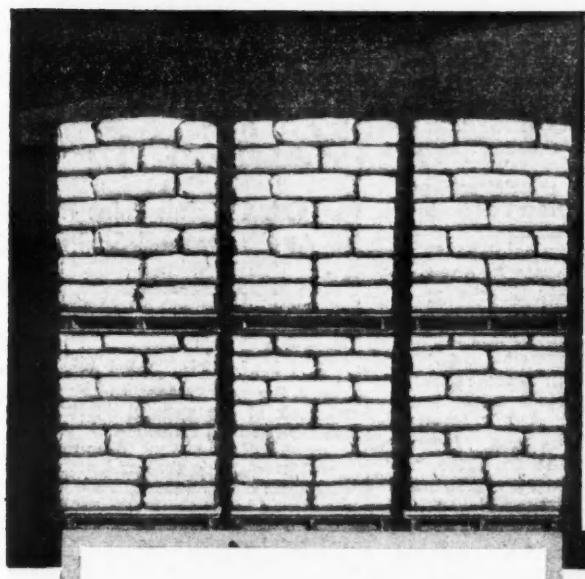
Waxes

Wax quotations, formerly grouped under one heading, are now listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

—Continued on page 58

AZODOX

New, Higher Density Zinc Oxide



STORES IN HALF THE SPACE

HERE ARE OTHER IMPORTANT REASONS WHY AZODOX IS BEST FOR YOU

Increased Mixing Capacity. AZODOX incorporates readily in oil, disperses completely. Its high density, low bulk gives greater capacity, steps up production in both mixers and mills.

Physical Properties Unchanged Except for Density. Consistency, particle size and shape, color and all other physical properties of AZO-ZZZ, American Process, paint grade zinc oxides are unaltered. *Apparent density only is changed.* All chemical properties are unchanged.

Flows More Freely, Less Dusting than conventional zinc oxides.

AZODOX Cuts Your Costs. Faster handling, easier storing, quicker mixing save you money.

Samples and test-lots of factory-proved AZODOX now available for you *at the same price of conventional zinc oxides.*

AZODOX is a revolutionary new form of zinc oxide (de-aerated). With twice the density, half the bulk of conventional oxides, AZODOX is the answer to your storage problem. AZODOX comes to you in an easy-to-handle small package, shaped to permit closely packed, unitized shipments. *And the perfect texture of the material remains unchanged.*

AZODOX is available in all grades of American process lead-free zinc oxide.

American Zinc sales company

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President Picks Trade Policy Aids

If, as it appears, those who are doing all sorts of guessing on why President Eisenhower has picked seven members of his cabinet to function as a trade policy committee are not ready to accept his stated purpose or desire, to have it advise and assist him in the administration of the reciprocal trade program, they are not going to accept the definition of its major objective given by its chairman—"to strengthen the American economy through sound and vigorous development of world trade . . . Its healthy development both safeguards the nation's economy from weakening influences and provides increasing opportunity for expanded business and employment."

In truth and in fact, acceptance of such potentialities on the part of such a group presents more than a little difficulty. They do not seem to fit in with the declaration by the assistant Secretary of Commerce that "Russia could replace this nation as a leader in world trade if the United States establishes new barriers to import business." There is something to guess about with reference to how—if at all—the creation of the new inside trade advisory unit is related to the major points of the President's program of "investment in reasonable economic aid to friendly nations," as outlined by his spokesman at the recent meeting of the Manufacturing Chemists Association (OPD, December 2, page 40).

There is a more direct purpose behind the creation of the new advisory group. It has to do with the role which awaits the President—or the Vice-President—at the NATO conclave next week. Recognizing the economic nature of the Soviet cold war, the NATO secretary-general has warned that its member-nations must cooperate fully and closely in the development of foreign relations and economic policies "if they are to maintain an effective front against communist aggression." The United States has been called upon specifically to "display the strongest possible leadership" in the efforts declared to be necessary to maintain unity of policy and practice among the NATO members.

There is need also that the President be adequately advised and assisted in the development and application of policies that will meet the potential challenges of Europe's common market and free-trade area. There is—or can be—either good or bad in that direction. The setup can provide a big and growing market for US goods and capital. It can eventually do away with the existing opportunities in that direction through the development of adequate industrial and commercial services within its own area. There are some puzzling problems in that connection, such as that presented by the signing of multilateral trade and payments agreements by Argentina with eleven western European members of the trade group, which give it recognition as a member.

Another problem comes by way of what is to be expected to eventuate in the economic struggling of France. That problem has already been complicated or aggravated by France's imposing of a 20-percent tax on all imports. It is not easy to guess what might even yet come out of the defeating by a 15-to-14 GATT vote of a US-British move to call upon West Germany to abolish the restrictions remaining on about 35 percent of its import trade. It is not unreasonable to assume that the US proposal in that instance—rather inconsistent on the part of a protective-tariff nation—might have some measure of aggravating effect upon the German feeling toward this country because of the alien-property stalemate, especially because Germany has reached an agreement with Argentina in that matter (giving it back the trademarks and patents confiscated by Argentina in 1945) as a condition of the South American nation's admittance to the European trade group.

Yes, indeed; the President needs a lot of advice and assistance in his big—so far, not so good—job of administering the reciprocal trade act as a promoter of "sound and vigorous development of world trade." It is not, however, so easy to see how he is going to get any such help from a group of his cabinet members, even though some of them have had actual experience in business. The congress is going to be treated to a lot of pushing and pulling by those who do not like the GATT type of foreign aid as long as they can pass their share of the cost of the alternative financial handouts along to those who must buy from them.

What Does Education Need

Until there has been a substantial lessening—a complete letup may actually be necessary—of the deluge of proclamations and protestations from sources with every possible degree of relevant qualification, there can be no logically safe, sane, or satisfactory conclusion with respect of what is the educational challenge to this country of the Russian launching of the sputniks. It is easy to declare, as it has been declared, that "we must match and exceed Soviet emphasis on mathematics, physical science, and technical subjects at all levels of our educational system." We must have an adequate force of persons qualified to invent and to make the push-button electronic gadgets which are rapidly making mathematics of the everyday sort one of those old things we used to have to have.

It is encouraging to learn from the president of the Manufacturing Chemists Association the nature and the extent of the chemical industry's contributions to the promotion of interest on the part of school boards, teachers, and students at all grades in scientific and technical subjects. It is at least interesting to learn that the Presidential Committee on Scientists and Engineers proposes that the Russian "technological threat—equally grave as that of military power"—be met with a "reorientation of American educational systems ultimately reaching into every industrial plant and every schoolhouse." The integration of industry and education being presupposed.

But, the important need is for clear thinking on what actually could, might, or would be the result of following the Russian pattern of cramming all sorts of students with more or less assimilable technical "knowledge," with no regard for what they can, may, or will do, with it. It is time to start thinking about the difference between learning something and being educated—a difference quite disturbingly evident in the everyday technical practice of driving a motor vehicle.

There is a serious truth in the recent declaration by the New York State Education Commissioner that "our schools must not, under the pressure of educating to keep up with science, neglect other equally important fields of knowledge." Equally deserving—yes, demanding—acceptance as fundamental truth is this recent statement by a prominent American leader in the Jewish faith: "It is only when education broadens, enriches, and ennobles the lives of men and nations, rather than merely adding to the myriad of facts and data, that it can be a blessing to humanity. While this newly aroused interest in scientific education is commendable, it shows a lack of understanding of the greater problems involved in providing for mankind more education in its broader sense."

If education is to contribute as it should to right, as well as to might, it must be directed to the needs of social economy, as well as to those in the areas of commercial and political economy.

Two needs of education stand out for remedial attention. One is for an adequate supply of adequately trained teachers. That need is particularly pressing in the teaching of science and technology directed to the proper service of humanity. The meeting of the inadequacy of compensatory incentives in the teaching field. There is a measure of approach in the recently announced grants by the National Science Foundation and the Fund for the Advancement of Education for the conducting of a collegiate summer institute for high school teachers of chemistry and physics and an experimental university pilot program for training graduates of liberal arts colleges to teach in secondary schools. But, the matter of attractive compensation remains to be disposed of. It deserves support from industry much more than does the providing of scholarships.

The other outstanding need is for a satisfactory adjustment of differences in theory and practice with reference to individuality and universality in the construction and application of curriculums. It is not possible to make all students the same in attitudes toward and capabilities in all subjects. There must be selectivity under proper criterions and with proper qualifications. There is a great need for the qualifying of teachers in all grades of the public schools for the satisfactory determination of the special fitness of individual students. Such determinations, however, should not be practically applied without proper discussion and decision by teacher, principal, parents, and student.

The problem of educational needs is a big one. It cannot satisfactorily be solved as long as any pressure is being applied in any manner at any point. Elimination of such pressures—preferably not by yielding to them—is the first step. The real need is for the know-how required for the taking of that step—out of today's "scaredom."

Washington Talks It Over

FDA Officials Think It Is About Time for Another Hard Look At the General Sanitation Program for Food Industries.

By Ralph L. Cherry
Chief, OPD Washington Bureau

Food and Drug Administration officials feel that the time is now ripe for industry and the government to take another hard look at the general sanitation program for the food industries.

A need that seems not to be met by the general program is that of keeping harmful bacteria out of foods. During the past generation, illnesses from contaminated milk and water have been almost eliminated but there is a steady incidence of bacterial upsets from food other than milk.

The difficulty often results from poor handling where the food is prepared for serving, but there are circumstances that dictate, it is said, closer attention to the factories themselves.

These are (1) high bacterial loads in some foods moving out of factories and (2) an increasing production of convenience foods that: are subject to bacterial inoculation during processing; are good media for bacterial growth; do not receive a final heat treatment in the plant that will destroy bacteria, and are frequently eaten by the consumer without much, if any, heating.

Several groups are considering the possibility of adopting standards of cleanliness which would rule a food fit or unfit according to its bacterial content.

Against this approach is the alternative procedure of determining what manufacturing conditions contribute to microbial contamination and by refining the methods of evaluating plant sanitation, correct these conditions through the conventional procedure of plant inspection.

Officials believe a combination of the two approaches may become necessary.

Herbicides and Waterfowl

If experimenters can find the key chemicals, the federal and state governments will open up a whole new market for herbicides in furtherance of the migratory waterfowl conservation program.

What with all the drainage and development work going on around the country, it is becoming increasingly important to find some way to make the remaining wetlands capable of sustaining the migratory waterfowl population.

What the research staffs of the Bureau of Sport Fisheries and Wildlife of the Fish and Wildlife Service are looking for is a new herbicide capable of eliminating the noxious weeds of the wetlands without injuring wildlife values and without hampering planting programs.

Not only is it necesary to know what to use, but when, how, and under what conditions the selected chemicals can be used to give best results.

Research to date indicates that effective killing of three of the worst pest weeds—cattails, phragmite, and needlerush—can be accomplished expeditiously. But alligator weed, a fourth nonfood producing plant, has thus far defied effective control by chemicals or otherwise.

Out of about 75 million acres of wetlands only about 9 million acres are considered good waterfowl habitat. If the weed control experiments under way prove successful they may point the way to convert hundreds of thousands of acres of waste marsh to duck and goose feeding areas.

Fats and Oils Reports

Bureau of Census plans to change the time and release date for its three M-28 fats and oils reports (crushing, production, and consumption by uses) but before doing so it would like to hear the comments from industry.

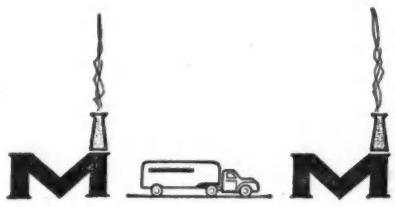
These reports are now issued monthly at 10 a. m. at the bureau's headquarters usually during the last week of the month and the first week of the following month.

Officials figure they can advance the release date two or three days but sometimes this will cause it to fall on the same day the cotton crop and cotton ginning reports are issued, which also are released at 10 a.m.

To avoid any conflict, the idea is to delay the release time for the fats and oils reports until 11 a. m.

The question is: will the advantages of an earlier issue date outweigh the disadvantages of the hour's delay in release time?

Send your comments to either Maxwell R. Conklin, chief of the Census bureau's industry division; Willis K. Jordan, chief of the food and textile branch of the industry division, or to Edward A. Robinson, chief of the food section of the food and textile branch, who now has immediate charge of getting out the reports.



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Heavy Chemicals

The bears were not hibernating last week. The mineral acids were all in free supply, and there were reports of sharp competition in some areas. Chlorine and the alkalies were coasting along in no particular direction. Producers didn't feel that business would improve by the end of the year. There were a few cheery items in the otherwise dismal picture: producers of borons announced that they would boost prices on most of their materials effective January 1. The Mexican sulfur producers shoved filtered sulfur up to $24 per long ton, giving a firmer aspect to the sulfur market which has been in dire straits the past few weeks.

A producer of barium chemicals has slated increases of $5 per ton, effective January 1, for the following items: barium carbonate, barium sulfide, and less carlots quantities of both anhydrous and crystal barium chloride.

The nonferrous metals picture was not pretty, in most instances. Lead dropped to the lowest point since the middle of March, 1954. London equivalent prices were even lower. Platinum also slumped.

Selenium was in oversupply, and producers cut prices to stimulate new end uses. The copper market was weak, although primary producers clung to their 27-cent price.

Lithium chemical prices remain about steady for the present, but competition is exceedingly keen on some items. Copper sulfate is moving fairly well industrially, and agricultural demand is looking up.

A caustic-chlorine producer in the northwest is still shut down, owing to a strike among nine paper mills in the area. The plant expects to operate again when mills resume operation.

The American Paper and Pulp Association reported production for the week ended November 30 at 86.5 percent of theoretical capacity, as compared with the revised figure of 91.9 percent for the previous week, and 98.6 percent for the corresponding week of last year.

Price Trends

Advanced

Potassium stannate, 4/10c. per lb.
Sodium stannate, ½c. per lb.
Stannic chloride, 4/10c. per lb.
Stannic oxide, 2½c. per lb.
Stannous chloride, anhyd., 6/10c. per lb.
Hydrous, cryst., ⅞c. per lb.
Stannous sulfate, 6/10c. per lb.
Sulfur, imp., Mexican, $1 per ton
Tin, ½c. per lb.

Reduced

Lead, ½c. per lb.
Platinum, $3 per oz.
Selenium, $3 per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
103.68	103.84	103.95	102.35

For Current Prices see page 9

Jan. 1 Price Advances

Barium carbonate, $5 per ton.
Barium chloride, l.c.l., $5 per ton.
Barium sulfide, $5 per ton.
Boric acid, $4.50 per ton
Borax, anhyd., $4.50 per ton
Decahydrate, $2.50 per ton
Pentahydrate, $3 per ton

Acids

Boric—Two producers plan to increase boric acid prices by $4.50 per ton. This would bring crystals to $133.50 per ton, bags, carlots, f.o.b. works.

Granular would be raised to $108.50 per ton, bags, carlots, f.o.b. works, and powdered, to 113.50 per ton, same basis, effective January 1, 1958.

One producer, in making the increase, pointed out that the boost was necessary owing to higher production costs, particularly in fuel and labor.

Hydrochloric—Lack of consuming demand in recent weeks has put a strain on list prices in some areas, owing to influxes of byproduct acid from organic chlorination operations.

It was emphasized that this situation is spotty in nature, and byproduct shipments usually disturb markets only temporarily. Ordinarily, producers who sell acid year in and year out do not meet the temporarily lower selling prices, it was pointed out.

The overall market is seasonally affected by production of DDT, for instance, or manufacture of antifreeze, when increased amounts of by product muriatic are produced.

When such byproduct acid gets into the hands of resellers, producers say, shaded prices in some instances have to be met. In the east in recent weeks, it was reported, average selling prices have held about the same.

Hydrofluoric—This acid has continued to show good sales levels, contrary to the general downward trend of the other mineral acids in the last few weeks.

Nitric—Considerable interest continues to be shown for red and white fuming nitric in the missiles program, and significant amounts are reported to be moving in that direction.

Producers emphasize, however, that these shipments account for only a small ripple in the overall nitric acid market. Other end uses, which account ordinarily for large amounts of acid, are not too active at present.

Sulfuric—The declining rate of steel production has hurt this market. Other end uses, notably fertilizer, have been more than seasonally off. Rayon is reported not too active.

Steel output sloughed off last week to an estimated 1,843,000 tons, or 72 percent of capacity, as against actual output of 1,846,000 tons, or 72.1 percent of capacity the previous week, according to the American Iron and Steel Institute.

Estimated production last week was significant, in that it was lower than the previous week, during which there was a holiday.

Bases and Salts

Barium Chemicals—A producer announced the following increases in price for some barium chemicals, effective January 1:

Barium carbonate, up $5 per ton, to $111.50 per ton, bags, carlots, works, and $126.50 per ton, less carlots same basis.

Barium chloride, anhydrous, less carlots only, up $5 per ton, to $196 per ton, f.o.b. works, in bags.

Barium chloride, crystals, less carlots

Inorganic Chemicals Output: September

The following figures compiled by the Bureau of Census indicate production of industrially important inorganic chemicals, in tons.

	September	August
Aluminum chloride, anhyd.	2,559	2,501
liq., cryst.	1,143	1,267
Calcium carbide	88,942	87,581
Carbon dioxide, liq., gas.	28,755	34,303
solid	49,316	64,669
Chlorine gas	329,627	323,404
Chromic acid	1,265	1,223
Hydrochloric acid	76,978	77,770
Hydrofluoric acid	6,825	6,786
Nitric acid	217,441	234,772
Phosphoric acid	371,984	353,015
Phosphorus elemental	27,181	25,086
Phosphorus oxychloride	1,361	1,291
Phosphorus trichloride	1,273	1,440
Potash, caustic, liq.	8,327	6,289
solid	1,617	1,212
Soda ash, light	201,867	214,790
dense	142,935	155,004
natural	55,201	54,040
Soda, caustic, liquid	367,350	354,015
dry	52,221	44,638
Sodium bicarbonate	7,889	7,788
Sodium metal	10,423	10,681
Sodium phosphate, mono.	564	566
Dibasic	2,042	2,523
Tribasic	4,330	4,033
Meta	5,590	4,930
Tetra	11,335	10,524
Acid pyro	1,236	1,218
Tripoly	59,533	60,071
Sodium silicate	53,867	46,045
Sodium sulfate, anhyd.	23,197	24,645
Glaubers salt	9,393	9,242
Salt cake, crude	54,257	56,310
Sodium sulfide, conc.	2,554	2,226
other	693	621
Sulfur dioxide	4,914	4,367
Sulfuric acid, gross	1,347,705	1,304,437

Heavy Chemicals

only, up $5 per ton to $160 per ton, bags, f.o.b. works.

Barium sulfide, 100 percent BaS, up $5 per ton, to $100 per ton, bags, carlots, f.o.b. works, and $110 per ton, less carlots, same basis.

Borax—Producers have scheduled increases for borax effective January 1. In this case, anhydrous would be lifted to $87.50 per ton, bags, carlots, f.o.b. works.

Other prices would include: Granular decahydrate, $47.50 per ton, bags, carlots, f.o.b. works, and granular pentahydrate, $63 per ton, same basis.

One producer, in making the increase, pointed out that the boost was necessary owing to higher production costs, particularly in fuel and labor.

Caustic Soda—Buying interest continues limited to prompt shipments to cover immediate needs. Supplies are in good balance, owing to cutbacks in chlorine output.

Chlorine—Consumers continue to play it close to the vest, and are not buying any more than they actually need. Demand is not expected to show much improvement for the balance of the year.

Lithium Chemicals—Market prices are about steady at present, but competition remains keen. Prices for chief salts are as follows:

Lithium carbonate, technical, 73c. per pound, drums, carlots, truckloads, freight allowed; 79c. per pound, ton lots, same basis, and 86c. per pound, smaller lots, same basis.

Lithium chloride, technical, anhydrous, 87c. per pound, drums, carlots, truckloads, freight allowed and 88c. to 92c. per pound, smaller lots, same basis.

Lithium hydroxide monohydrate, 75c. per pound, drums, carlots, truckloads, freight allowed, and 76c. per pound, less carlots, same basis.

Sodium Chlorate—Material in 350-pound drums is quoted unchanged at 9c. per pound, carlots, and 9½c. to 10½c. per pound, less carlots, f.o.b. works. On December 1, 100-pound drum prices were lifted ¼c. across the board. They had previously quoted the same as 350-pound drums.

Sulfur—A producer of Mexican sulfur last week announced that its sulfur would be increased to $24 per long-ton, f.o.b. Coatzacoalcos, Veracruz, Mexico.

Late in the week, the other producer of Mexican sulfur raised its price to $24 per long-ton for filtered, and $23 per long-ton for dark.

American producers were gratified by the announcement, to say the least. While they were reticent to predict just what sort of effect the boost would have on domestic prices over the long haul, it has been common knowledge in the trade that several officials of sulfur companies here have called the recent sulfur reductions unwarranted.

There has been a strong undercurrent in the American market to boost sulfur prices, since it has been claimed that the recent reductions to meet competition from Mexican producers have cut margins to the bone.

The increase in Mexican sulfur, announced last week, was considered by some here as just the kind of ammunition needed to start a movement for higher prices for domestic Frasch sulfur.

Tin Salts—With firmer metal, potassium stannate was quoted at 74.1c. to 81.4c. per pound; sodium stannate, 59.3c. to 65.2c.; stannic chloride, 75.2c. to 76.2c.; stannic oxide, 99.5c. to $1.005; anhydrous stannous chloride, 94.6c. to $1.44; hydrous crystals, 82⅜c. to 83⅜c.; and sulfate, $1.004 to $1.024.

Nonferrous Metals

Copper—Primary producers held at the 27-cent level, while custom smelters continued at 25c. per pound, delivered US destinations. Markets remained quiet. Custom smelters reported light sales.

Lead—Last week metal tumbled to lows not seen here since mid-March, 1954. This is turn caused reductions in the oxides. Pig lead was newly quoted at 12.8c. per pound, East St. Louis, and 13c. per pound, New York basis.

Mercury—Market was quiet. Metal continued listed on spot at around $225 to $230 per flask. Consumers and sellers kept a watchful eye on the government's buying program.

Platinum—Metal sank $3 per ounce last week, and was newly quoted at $77 per ounce for large lots and $80 for small lots, spot. This was the lowest price since 1950.

Selenium—Metal was dropped to $7.50 per pound, owing to heavy production. The producer who initiated the drop said that the lower price was put into effect in order to stimulate a broadening of end uses for the metal.

Domestic production of selenium and compounds in September was 97,003 pounds, according to the Bureau of Mines. The output was 13.8 percent below August output of 112,539 pounds, and 4.2 percent above the average monthly production in 1956.

Shipments in September totaled 55,220 pounds of contained selenium, compared with 77,645 pounds shipped in August. Producers' stocks at the beginning of September were 524,651. By the end of the month, they had risen to 577,236 pounds.

Imports of selenium and salts in August amounted to 7,545 pounds. Imports of selenium from Canada in that month totaled 5,735 pounds, a decline from July's 15,250 pounds, according to the Department of Commerce.

Silver—Bullion was quoted unchanged, at 90c. per troy ounce, spot, on Friday.

Tin—Market appeared firmer, and Straits metal was quoted on Friday at 91¾c. per pound, spot.

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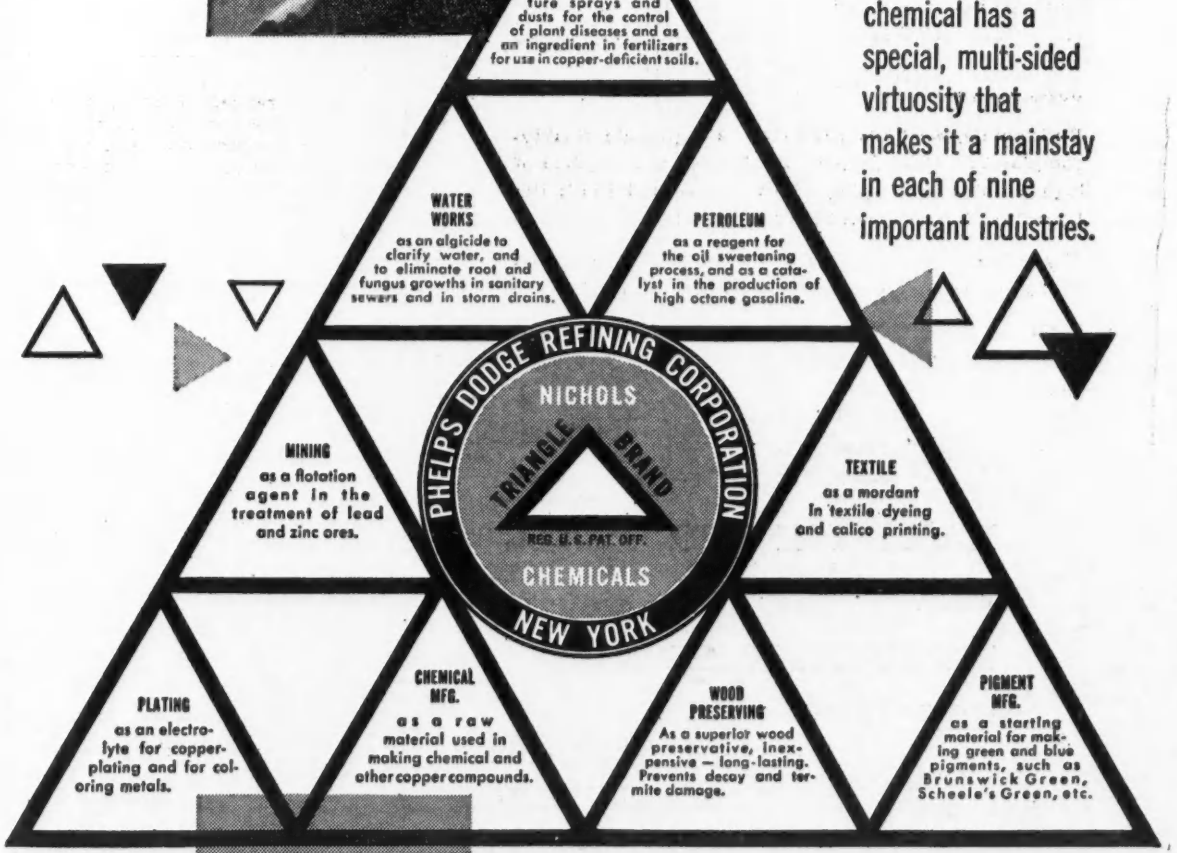
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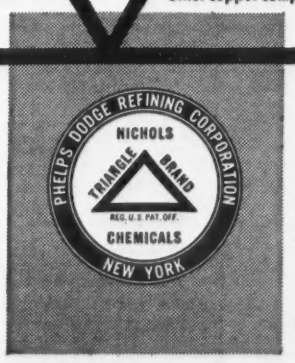

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American Can to Expand By 1.5 Million Square Feet

Physical expansion of American Can Company facilities during 1957 will total about 1.5 million square feet in fifteen locations, according to G. W. Reese, vice-president for manufacturing for the New York firm.

He said the new construction would account for a substantial part of Canco's total capital expenditure for the year, expected to reach about $52 million.

Of the added space—the equivalent of about eight city blocks—more than half is for housing new equipment for Canco's coil processing program, Mr. Reese said. Coil facility locations include Tampa, Fla.; Hillside, N. J.; Milwaukee, Wis.; St. Louis, Mo.; Hammond, Ind.; Houston, Tex., and Oakland and Los Angeles, Calif.

Other major additions include new can-making plants at Detroit, Mich.; Blue Ash, Ohio; San Antonio, Tex., and Bayamon, Puerto Rico. Finished product warehouse space has been added at other locations.

Naugatuck Chemical Makes Dr. Tuley Group Manager

Dr. W. F. Tuley has been appointed to the new post of group manager of chemical development for the Naugatuck Chemical division of United States Rubber Company, New York. He formerly supervised rubber chemical and synthetic rubber research.

In his new assignment Dr. Tuley will coordinate research and development on agricultural chemicals, rubber chemicals, heavy chemicals, chemical intermediates and chemicals used in plastics.

Western Chemical Group to Meet

Basil Skalkeas, of Rilsan Corporation, Boston, will speak on "Marketing Imported Plastics: Nylon-11, a Case History," before the December 12 meeting of the Western Chemical Market Research Group, at Marines' Memorial Club, San Francisco.

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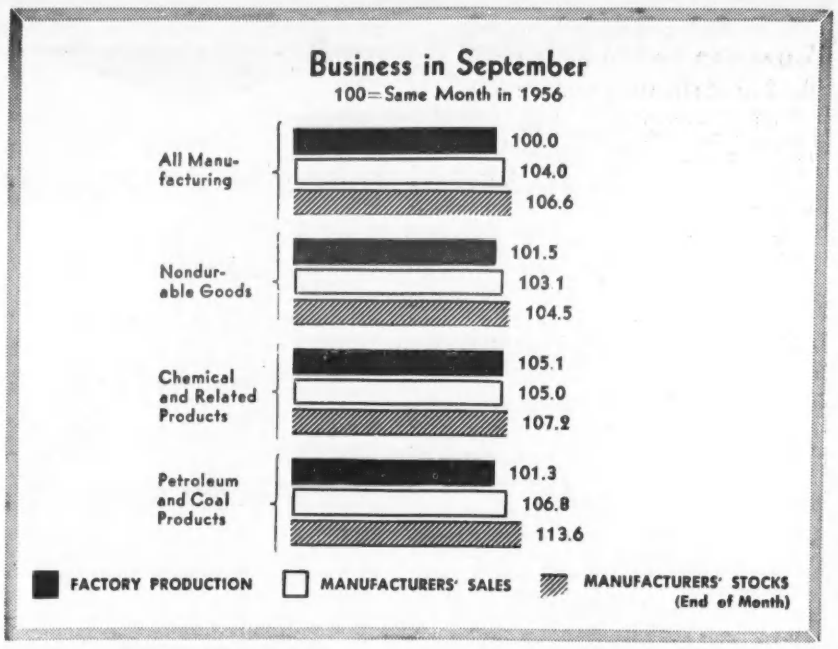

DuPont 'Freon' Division Makes Personnel Changes

Dr. Donovan E. Kvalnes, technical manager of the "Freon" products division of E. I. duPont de Nemours & Co., Wilmington, Del., has assumed additional duties as the division's sales development manager, replacing Dr. Edmond G. Young, who has been named manager of development conferences in the marketing research division of the company's development department.

In other changes effective the same date, Dr. Frank W. Blodgett, chemist on the staff of the company's "Freon" products laboratory and for the last ten months on temporary assignment as a technical assistant to the division's aerosol sales section, became a technical assistant to Dr. Kvalnes on sales development problems.

Ames, Canada, Elects

George W. Orr, jr., has been elected president of Ames Company of Canada, Ltd., of Toronto, a subsidiary of Ames Company, Inc., of Elkhart, Ind., and Charles E. Rhyne has become vice-president. Mr. Orr continues as president of the parent company.

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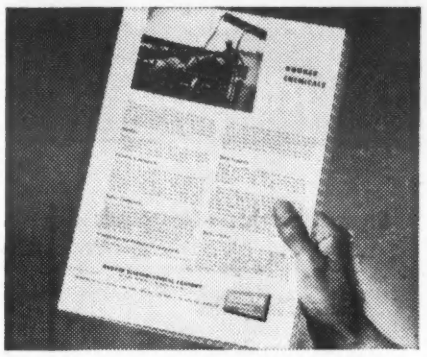

New bulletin lists Hooker products

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Soap Sales Reach Record In the First Three Quarters

Sales of soaps and synthetic detergents set a new nine-months record, topping last year's all-time high for the first three quarters by 3 percent tonnage-wise and 8.4 percent in dollar value, according to the quarterly sales census conducted by the Association of American Soap and Glycerin Producers.

Seventy-two manufacturers, representing a substantial portion of the industry, reported nine-months 1957 sales of soaps and synthetic detergents totalling 3,145,194,000 pounds, with a dollar value of $760,881,000, compared to nine months sales in 1956 of 3,053,796,000 pounds and $702,203,000.

Tonnage sales of synthetic detergents, solids and liquids, totalling 2,224,604,000 pounds for the first nine months this year, were up 7.8 percent over the comparable period a year ago. Dollar sales amounting to $518,977,000 were 12.7 percent ahead of last year. Synthetic detergent sales for the first nine months this year represent 70.7 percent of the total market tonnage-wise and 68 percent in dollar value.

Sales of soaps, solid and liquid, for the first nine months this year were 920,590,000 pounds and $241,904,000, a decline of 7 percent tonnage-wise from the same period in 1956. The dollar value of sales was approximately the same for both nine-months periods.

Liquid synthetic detergent sales continue their advance. For the first nine months this year, sales amounted to 255,264,000 pounds, up 31 percent over 1956. Dollar sales totalling $93,688,000 were 18.4 percent over the same period last year.

Commerce Secretary Names International Scene Advisors

A committee of sixty business executives was set up last week to advise Secretary of Commerce Sinclair Weeks on policies and programs promoting international trade, travel and investment.

Secretary Weeks said that the group, to be known as the World Trade Advisory Committee, will hold its first meeting December 16 in Washington, D. C. Among the topics to be discussed will be: East-west trade, export control policies, renewal of the trade agreement act, US private investments overseas, the international trade fair and trade missions programs, and prospects for further development for world trade.

Henry Kearns, assistant secretary for international affairs, will preside at the December 16 meeting. Among those who have accepted appointments are: Reese H. Taylor, of Union Oil Company of California; E. A. Locke, jr., of Union Tank Car Company; Gaylord C. Whipple, of Quaker Oats Company; Harry A. Bullis, of General Mills, Inc., and Victor C. Folsom, of Sterling Drug, Inc.

Obituaries

Allan A. Miller

Allan A. Miller, domestic sales manager of Schering Corporation, Bloomfield, N. J., died December 2 in New York. He was forty-seven years old.

Mr. Miller had served as domestic sales manager of Schering since January, 1957. He joined the company in 1942, and in 1955, was named marketing manager.

Frank E. Richardson

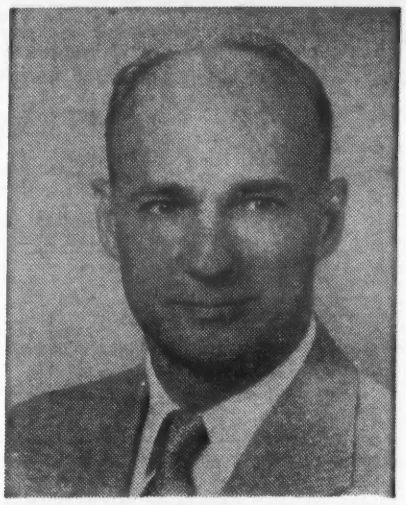
Frank E. Richardson, rated one of the world's foremost pipeline and oil refinery consulting engineers, died December 3 in Shreveport, La. He was associated with Brown & Root, Inc., at the time of his death.

He had been assigned in 1947 to the newly-organized Texas Eastern Transmission Corporation as a project engineer in connection with the conversion of the "Big Inch" and "Little Inch" pipelines from liquid to gas.

During World War II, Mr. Richardson participated in the design of the pipelines with War Emergency Pipe Lines, Inc. He also participated in design of pipelines in the China-Burma-India theatre.

Stuart R. Elder, manager of the American Oil Company branch office at Providence, R. I., died November 24 in that city. He was fifty-five years old.

Charles T. Rogers, a retired sales representative of Phelps Dodge Corporation, New York, died December 2 in Mountainside, N. J. He retired from Phelps Dodge last January.



EXPORT SALES MANAGER: Carl W. Weber, named manager of export sales for the chemical division of General Mills, Inc., Kankakee, Ill.

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Agricultural Chemicals

Announcement of a two cents across the board price advance in DDT by a major producer two weeks back prompted other people in the business to do the same. Profit margins, the trade decided, were getting a bit too slim. Call for DDT has been steady, sources mentioned, with routine demand nicely supplemented by governmental and United Nations procurement orders. Inquiry for other pesticides has been dull, however. Production of most materials held up well during the summer, reported the Commerce department, and as a result producers and formulators have accumulated sizable stocks of some products.

A recent Department of Commerce bulletin pointed out that DDT and copper sulfate, the two leading pesticides quantitywise, have exhibited opposite trends in output this year. DDT production has declined about 5 percent from 1956 despite an equivalent increase in export. On the other hand, copper sulfate output rose 7 percent, although exports decreased slightly. Exports of both commodities account for 45 to 55 percent of production.

January 1 Price Advances

Ammonium nitrate, $4 per ton
Anhydrous ammonia, $4 per ton
Nitrogen solutions, 4c. per unit of nitrogen.

Reportedly, the general tendency in fertilizer consumption is upward, with emphasis placed on higher analysis fertilizers. According to a survey by a member of the National Plant Institute, total tonnage of fertilizers consumed in 1955-56 declined by approximately 2.8 percent from 1954-55. However, because of the higher analyses of the material, it was estimated that the actual tonnage of plant nutrients consumed did not decline.

Price Trends

Advanced
DDT, 2c. per lb.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
107.52	107.45	112.26	107.22

For Current Prices see page 9

Animal and Plant Foods

Ammonium Nitrate—Production of fertilizer grade material in September amounted to 186,244 as opposed to 190,413 short tons for the month previous. Last year in the same month output was 138,086 short tons. The Census bureau reported that stocks were slightly greater at the end of September than the same month a year ago—132,862 and 128,469 short tons, respectively.

Effective January 1, major producers will quote ammonium nitrate at $72 per ton. Reports that other minor producers will post a $70 price have been received but not as yet confirmed.

Ammonium Sulfate—According to the Bureau of the Census, synthetic ammonium sulfate production in September amounted to 83,541 short tons, slightly less than the 84,575 short tons produced in August. September, 1956, output totaled 93,462 short tons.

Output of byproduct material in September was 74,497 short tons, compared with 78,245 short tons in the month previous and 75,621 short tons the same month last year. Stocks during the month at 102,510 were roughly 17,000 short tons greater than in August.

Anhydrous Ammonia—Production of synthetic anhydrous ammonia during September amounted to 290,624 short tons as compared with the August's 294,507 short tons, the Census bureau reported. Output during September of the previous year totaled 257,014 short tons. By September's end, stocks at producing plants at 70,871 short tons were roughly three thousand tons less than the same date last year. Byproduct liquor ammonia production totaled 1,339 short tons during September, which was slightly less than the month previous and the same month in 1956. Stocks of this material stood at 1,558 short tons, down one hundred tons from September, 1956.

Animal Proteins—No price changes on blood, bonemeal or tankage were reported last week. The market for the most part kept to the dull side with little pick-up in demand anticipated in the remainder of December. Dealers expect business volume to start a gradual rise after the first of the year.

Fishmeal and fishscrap prices on the east coast which dropped $6 per ton a little more than a week ago, were steady at new quotes. Call for these materials was said to be spotty. Supplies were liberal.

Urea—Some rumors about possible January 1 price changes have been circulating in the trade in past weeks but informed sources say it's unlikely that new quotations will be established the first of the year. At the present time, demand for urea is quite good, producers said.

Pesticides

DDT—A two cent per pound across the board advance in DDT prices was initiated by a major pesticide producer the last week of November. Other producers promptly followed suit.

Labor, manufacturing and shipping expenditures, sources said had increased to the point where a price hike was imperative if a decent margin of profit was to be realized.

Farm Chemicals Foreign Trade: September

Following are data compiled by the Census Bureau indicating volume of exports and imports of agricultural chemicals. Classified as ammonium nitrate mixtures are those containing 20 percent or more nitrogen. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. Superphosphate is classified as normal when a.p.a. is less than 25 percent, concentrated when a.p.a. is 25 percent or more. The term tons refers to short tons.

		September 1957	*First Six Months 1957*
EXPORTS			
Ammonium nitrate	lbs.	1,209,104	48,861,567
Ammonium sulfate	lbs.	92,241,613	939,269,264
Insecticides, fungicides and agricultural sulfur	lbs.	10,957,673	92,021,190
Phosphate rock	tons	362,672	1,676,835
Potassium chloride	tons	32,708	250,359
Superphosphate, normal	tons	25,441	158,848
Concentrated	tons	5,390	167,380
Weed killers	lbs.	1,320,168	11,930,178
IMPORTS			
Ammonium nitrate, including mixtures	tons	30,038	182,563
Ammonium phosphates	tons	14,749	72,226
Ammonium sulfate	tons	11,843	92,683
Blood, dried	tons	474	1,733
Calcium cyanide or lime nitrogen	tons	8,381	23,858
Fishmeal and scrap	tons	50	1,972
Nitrate, calcium	tons	651	41,542
Sodium, crude and refined	tons	36,449	325,502
Phosphates, crude, including apatite and phosphate rock	tons	35	55,852
Potassium chloride, crude	tons	27,493	112,547
Nitrate, crude	tons	61	389
Sulfate, crude	tons	8,285	14,285
Urea	tons	1,837	28,798

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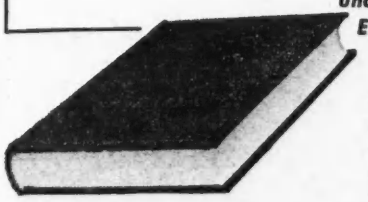

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Aliphatic Organics

A leading producer reduced prices of butyl acrylate and 2-ethylhexyl acrylate effective last Monday. In the east, the reduction on butyl acrylate amounted to 10 cents per pound in bulk and 9¼ cents per pound in drumlots and the reduction on 2-ethylhexyl acrylate amounted to 5 cents per pound in bulk and 4¼ cents per pound in drumlots. The reductions were somewhat smaller in the west on account of a simultaneous increase in western price differentials instituted in order to offset higher transportation costs. The new prices are identical to those listed by another major producer who (as reported in this department in the previous issue) revised butyl acrylate and 2-ethylhexyl acrylate prices effective December 1.

Even without fermentation production, it seemed that the country would be adequately supplied with both n-butyl alcohol and acetone. Byproduct acetone from the cumene process for production of phenol seemed to be adequate to make up any difference in the one case, while substantially expanded facilities for synthetic output appeared to be sufficient to keep the country supplied with butyl alcohol.

Increased consumption of feeding cane molasses with the onset of winter pasture conditions and anticipation of a poor yield from the Louisiana cane harvest combined to firm up blackstrap markets at southern port terminals and middle western feed mixing centers. The New Orleans price was 1 cent per gallon higher in the week ended last Tuesday, Agricultural Marketing Service reported. The Louisiana harvest was late, and several cane grinding plants reported low yields of molasses per ton of cane. In an unsettled market that characterized trade along the eastern seaboard, the New York price tumbled 2 cents per gallon. Trade reports indicated that some firms were discounting quoted prices by as much as 1 cent to 1½ cents per gallon in the Philadelphia, Boston and Albany areas.

Industrial grades of propylene glycol were reported moving fairly well, though the market wasn't quite as lively as it had been some months ago. USP material was moving steadily into uses in foods and cosmetics.

Diversity of the consumption pattern had a steadying influence on the market for ethyl chloride.

Trade sources reported very strong demand for n-propyl alcohol. This trade was given a boost by manufacture of n-propyl acetate, which, in turn, was in good demand for use in lacquer solvents.

Tariff Commission reported that 7,647,209 pounds of technical plus USP ethyl ether was produced during August of this year. It was the highest figure recorded in any one month since September, 1956, when some 7,822,452 pounds was turned out.

Acetone—Though it appeared that fermentation producers were using most of their raw material molasses to produce ethyl alcohol, domestic consumers of acetone were assured of adequate supplies in the foreseeable future. When fermentation operations were curtailed a year or so ago, byproduct acetone from the cumene process for production of phenol appeared on the market at just the right moment to take the place of the missing fermentation acetone. The cumene process material apparently has been adequate to supplant the fermentation material.

Butyl Acrylate—A leading producer reduced prices effective last Monday. In the east, the reduction amounts to 10c. per pound in bulk and 9¼c. per pound in drumlots. The reduction in the west was somewhat smaller on account of a simultaneous increase in western price differentials instituted in order to offset higher transportation costs. The new prices are identical to those listed by another major producer, who (as reported in this department in the previous issue) revised butyl acrylate prices effective December 1.

On a works basis with minimum transportation charges allowed and prepaid to destination on shipments of one drum or more, eastern prices are 55c. per pound in tankcars and tanktrucks; 57½c. per pound in straight or mixed carloads or truckloads; 58½c. per pound in four hundred-pound drumlots, less truckloads; 75c. per pound in lots of five-gallon containers (thirty-seven pounds net) and 85c. per pound in one-gallon containers (seven pounds net).

Prices are 1½c. per pound higher on bulk and drum shipments to Arizona, California, Idaho, Nevada, Oregon, Utah and Washington.

n-Butyl Alcohol — Trade sources said that fermentation producers were turning out very little n-butyl alcohol this year, probably less than 10 percent of the

Price Trends

Advanced
Molasses, New Orleans, 1c per gal.

Reduced
Molasses, New York, 2c. per gal.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
131.03	*131.04	131.09	130.79

* Revised.

For Current Prices see page 9

January 1 Price Advances

CMC, crude, 96.4%, low or medium vis., 2c. per lb.
Crude, 65%, low or medium vis., 2c. per lb.

Aliphatics Foreign Trade: September

Exports and imports of industrial aliphatic organics for the month of September, this year and last, and cumulative totals through the first nine calendar months of both years, as reported by the Bureau of Census, were as follows:

		September 1957	*September 1956*	*First Nine Months 1957*	*First Nine Months 1956*
EXPORTS					
Butyl acetate	lbs.	636,243	522,439	8,056,514	7,832,148
Butyl alcohol	lbs.	423,102	6,658,919	29,000,501	31,872,335
Ethyl alcohol and methylated spirits	lbs.	20,969,866	320	25,487,892	**
Ethylene glycol	lbs.	8,974,814	10,289,161	109,419,292	45,408,389
Glycerine, 100 percent basis	lbs.	802,181	849,493	7,193,113	7,978,195
Methyl alcohol	gals.	1,724,717	117,573	3,609,416	**
Methyl ethyl ketone and methyl acetone	lbs.	787,820	774,235	6,883,028	6,752,728
Propyl alcohols	lbs.	590,015	208,082	7,108,646	4,182,064
IMPORTS					
Acetic acid (over 65 percent)	lbs.	743,360	492,100	3,867,860	6,826,780
Acetic anhydride	lbs.	730,875	371,490	5,339,285	2,592,770
Acetone, MEK and homologues	lbs.	0	176,495	817,576	6,359,029
Amyl alcohol and fusel oil	lbs.	0	4,160	10,560	61,760
Butyl alcohol	lbs.	0	0	54,640	194,900
Chloroacetic acids (mono and tri)	lbs.	357,791	365,746	2,947,992	2,099,715
Ethyl alcohol	gals.	0	2,449,192	3,148,505	11,355,962
Formic acid	lbs.	181,567	62,400	1,248,357	827,203
Glycerine, crude	lbs.	4,299,768	2,533,083	24,113,630	15,935,640
Glycols, their ethers and esters	lbs.	21,132	17,186	393,842	280,023
Lactic acid (55 percent or more by weight)	lbs.	0	1,920	27,894	4,590
Methyl alcohol, including wood alcohols	gals.	0	10,212	4,909	181,383
Tetrachloroethane	lbs.	0	0	2,500	5,800
Trichloroethylene	lbs.	2,092,466	1,436,437	30,594,768	16,161,500
Vinyl acetate, unpolymerized	lbs.	2,752,080	3,026,040	22,716,596	28,896,433
Vinyl alcohol, including derivatives	lbs.	716,202	2,542,557	9,798,165	15,759,394

Aliphatic Organics

total output by all routes. This left a heavy burden of supply on synthetic producers. The substantial expansion of the synthetic industry during the last few years has enabled these producers to keep the entire country well supplied, however. It was estimated that about 20 percent of the alcohol was being consumed in manufacture of n-butyl acetate, or about 45 million pounds of a total output of something like 220 million pounds per year.

Carbon Disulfide—Bureau of Census reported that 83,250 pounds of carbon disulfide was exported during September of this year.

Production during August of this year amounted to 45,294,160 pounds, the Tariff Commission reported, compared to 45,005,490 pounds produced in the month previous and 44,551,510 pounds turned out during August, 1956. Cumulative output through the first eight calendar months of this year added up to 357,162,451 pounds. Production over the like period in 1956 was 375,974,648 pounds.

Carbon Tetrachloride — Production of carbon tetrachloride declined to 24,253,733 pounds during August of this year, the Tariff Commission reported. It was the lowest figure previously reported since that for last February. Output came to 29,175,059 pounds during the month previous and to 23,429, 056 pounds during August, 1956. Cumulative figures for the first eight calendar months added up to 217,117,296 pounds this year, as against only 198,674,356 pounds produced in the like period in 1956.

Bureau of the Census reported that 279,893 pounds of carbon tetrachloride was exported from this country during September of this year.

Ethyl Acetate—Exports of ethyl acetate during September of this year amounted to 127,847 pounds, the Census Bureau reported.

Production during August of this year added up to 7,415,709 pounds, the Tariff Commission said. (That and the following figures on production are all based on 85 percent ethyl acetate content.) Output during the month previous was 8,037,936 pounds, while that reported for August, 1956, amounted to 8,111,283 pounds. Aggregate production over the first eight calendar months of this year came to 57,905,068 pounds. For the like period in 1956, the cumulative figure was 58,122,311 pounds.

Ethyl Chloride—Diversity of the consumption pattern had a steadying influence on this market. Technical ethyl chloride was in good demand for use in manufacture of organic derivatives, dyes, local anaesthetics and insecticides and for use as a refrigerant and solvent. The USP material found a volume market for use in ethylation of fine chemicals and manufacture of anaesthetics. Supplies were adequate at most or all shipping points. Prices were unchanged at quotations of long standing.

Ethyl Ether—Total output of technical plus USP ethyl ether during August of this year rose to 7,647,209 pounds, the Tariff Commission reported, compared to the 5,544,768 pounds turned out in the month previous. It was the highest production recorded in any single month since the 7,822,452 pounds reported produced during September, 1956. Production during August, 1956, amounted to 7,405,652 pounds.

Cumulative output over the first eight calendar months of this year came to 49,675,190 pounds. Production during the like period in 1956 amounted to 50,426,074 pounds.

Bureau of the Census reported that 74,039 pounds of ethyl ether was exported from this country during September of this year.

2-Ethylhexyl Acrylate — A leading producer reduced prices effective last Monday. In the east, the reduction amounts to 5c. per pound in bulk and 4½c. per pound in drumlots. The reduction in the west was somewhat smaller on account of a simultaneous increase in western price differentials instituted in order to offset higher transportation costs. The new prices are identical to those listed by another major producer, who (as reported in this department in the previous issue) revised 2-ethylhexyl acrylate prices effective December 1.

On a works basis with minimum transportation charges allowed and prepaid to destination on shipments of one drum or more, eastern prices are 50c. per pound in tankcars and tanktrucks, 52½c. per pound in straight or mixed carloads or truckloads, 53½c. per pound in four hundred-pound drumlots, less truckloads, 70c. per pound in lots of five-gallon containers (thirty-seven pounds net) and 80c. per pound in one-gallon containers (seven pounds net).

Prices are 1½c. per pound higher on bulk and drum shipments to Arizona, California, Idaho, Nevada, Oregon, Utah and Washington.

Formaldehyde—Output of formaldehyde (on the basis of 37 percent formaldehyde content by weight) climbed to 103,324,075 pounds during August of this year, the Tariff Commission reported, as compared to production of 93,383,301 pounds during the month previous. Production during August, 1956, amounted to 108,512,131 pounds. Aggregate output over the first eight calendar months of this year was 833,834,544 pounds. Production over the like period in the year previous added up to 880,559,541 pounds.

Exports during September of this year, the Census Bureau reported, amounted to 1,534,372 pounds on the basis of 40 percent formaldehyde solution.

Molasses — Increased consumption of feeding cane molasses with the onset of winter pasture conditions and anticipation of a poor yield from the Louisiana cane harvest combined to firm up blackstrap markets at southern port terminals and middle western feed mixing centers. The New Orleans price was 1c. per gallon higher in the week ended last Tuesday, Agricultural Marketing Service reported. The Louisiana harvest was late, and several cane grinding plants reported low yields of molasses per ton of cane.

Blackstrap was quoted in the range 12c. to 12½c. per gallon at latest reports.

In an unsettled market that characterized trade along the eastern seaboard, the New York price tumbled 2c. per gallon to a price of 18c. per gallon. Trade reports indicated that some firms were discounting quoted prices as much as 1c. to 1½c. per gallon in the Philadelphia, Boston and Albany areas.

Exports of Cuban molasses during the current calendar year through October 15 amounted to 120.9 million gallons of blackstrap and 748,406 gallons of invert (high-test) molasses.

Propylene Glycol — Industrial grades were reported moving fairly well last week, though the market wasn't quite as lively as it had been some months ago. The consumption pattern was diverse. However, the resins industry by itself was an important factor, and this outlet wasn't generating as much business as the trade had counted on. USP material was moving steadily into uses in foods and cosmetics. Supplies were generally abundant. Prices were steady at unchanged levels.

Tripropylene Glycol—Increasing volume of trade has induced the industry to make this material generally available in tankcar and tankwagon lots in recent months. On a freight allowed basis, tripropylene glycol was offered in the east at 18½c. per pound in tankcars and compartmented tankcars and at 19c. per pound in tankwagons and compartmented tankwagons on minimum shipments of 1,000 gallons.

On the same basis, drumlots were selling in the east at 21c. per pound in carlots and truckloads and at 22c. per pound in less carlots, less truckloads, prices established June 15, 1956, on contract and July 1, 1956, on spot business.

Prices for tripropylene glycol in the west were 1c. per pound higher across the board.

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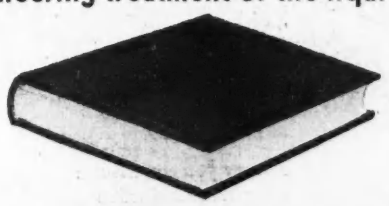

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Textile, Leather Chemicals

Moderate volume of business was reported in textile and leather chemicals last week. Consumers continued to confine purchases to prompt delivery, although improved inquiry was in evidence for early next year delivery. Market tone remained steady and quotations were maintained for the entire list. In the chemical group, activity was restricted to withdrawal of materials against recent orders. In sizing materials, good volume of business was reported for actual needs. Tanning materials were quiet but replacements were maintained at former levels. Flake egg albumin was boosted 12 cents per pound due to higher cost and low egg stocks. Yolk also was raised 7 cents per pound.

British woolen and worsted mills requested the rescinding of the higher tariff on wool fabric imports invoked May 24 by Presidential action under the Geneva reservation or in the alternative, suggested substantial relief from the effects of the tariff increase in a brief filed with the Committee of Reciprocity Information. Last May the President invoked the reservation clause limiting imports to 14 million pounds of wool cloth at ad valorem duty of 25 percent, plus 37½ cents per pound, with additional imports to pay duty of 45 percent. The US had the right to modify the duty if annual imports by weight exceeded 5 percent of the annual average of the preceding three years. British mills suggested the following alternatives: "Increasing the tariff quota quantity from the poundage equivalent of 5 percent of domestic production to a higher poundage figure, such as 21 million pounds or some reasonable comparable amount; establishing the extra ad valorem rate at some level below 45 percent, such as 35 percent, which level comprised the rate of duty on fabrics valued at more than $2 per pound at the time the trade agreement was negotiated in 1947; and the establishment of country quotas as authorized by the General Agreement on Tariffs and Trade."

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
103.09	103.09	103.55	108.55

For Current Prices see page 9

Chemicals

Bichromates — Production of sodium bichromate and chromate in September totaled 8,544 tons according to the Census Bureau against 8,166 tons, August and 10,263 tons, September last year. Stocks at producing plants amounted to 6,543 tons for September and 7,801 tons, August. Consuming inquiry was quite active for first quarter delivery next year. Prices were unchanged and well held for all grades.

Sodium Acetate — Business was restricted to prompt delivery. Quotations were without change.

Sodium Hydrosulfite—Business was restricted to actual needs. Prices were without change and steady.

Sulfonated Oils—Trading was spotty chiefly for actual needs. Quotations were without change.

Sizing Materials

Albumin Egg—Higher cost and scarcity of egg stocks resulted in a sharp price advance. Flake was boosted to $1.50 per pound and powder to $1.54, for spot delivery. Trading was fairly active before the advance. Technical also was firm ranging from $1.08 to $1.10 per pound, as to seller.

Liquid egg production during October totaled 12,489,000 pounds, compared with 13,514,000 pounds in October 1956 and the 1951-55 October average of 7,793,000 pounds. Quantities used for immediate consumption were up 68 percent from a year ago while drying and freezing were down 10 and 15 percent respectively.

Egg solids output in October amounted to 1,156,000 pounds, against 1,205,000 pounds, October last year and the October average of 840,000 pounds. October production consisted of 353,000 pounds of whole egg solids, 483,000 pounds of albumen solids, and 320,000 pounds of yolk solids. Production during October 1956 consisted of 263,000 pounds of dried whole egg, 383,000 pounds of albumen solids, and 559,000 pounds of yolk solids.

Frozen egg production during October totaled 7,415,000 pounds, compared with 8,724,000 pounds in 1956, and the average of 5,250,000 pounds. Frozen egg stocks decreased 25 million pounds during the month, compared with 20 million pounds in October 1956 and the average decrease of 26 million pounds.

Corn Starch—Business was spotty and confined to immediate needs. Withdrawals against former orders were in good request. Pearl was quoted at $7.36 per 100 pounds, paper bags, carlots, New York, and powder, $7.48, same basis. Smaller lots were 15c. higher.

Egg Yolk—Production in October totaled 320,000 pounds compared with 559,000 pounds, October last year, according to the Department of Agriculture. Market was unchanged and steady. Prices were stronger and raised to $1.35 per pound, depending upon quantity.

Potato Starch—While new business was light and spotty, the market remained steady at prevailing quotations. Movement against recent orders continued quite active. Carlots was unchanged at 6¼c. per pound mills, f.o.b. Maine, less ¼c. for shipment below the Maxon Dixon line. Idaho starch also was well held at 6½c., carlots, mills for prompt shipment. Stocks on spot were unchanged from 8¼c. to 9¼c. per pound, exwarehouse, according to quantity.

Sago Flour—While business was confined to actual needs, stocks on spot were maintained at former levels. Raw was quoted at 7c. to 7¼c. per pound, and refined, 8½c. to 9c., exwarehouse, as to quantity. Interest in replacements was reported light. Singapore No. 1, was offered at 5½c. per pound, carlots, exdock, prompt shipment and lower grades from 5c. to 5.1c., same basis.

Tapioca Flour—Good call was noted for material against former contracts, while new business was limited to actual needs. Siamese medium grade was unchanged at 5.7c. per pound, carlots, exdock, prompt shipment and A grade grade 5.9c. to 6c., same basis. Brazilian flour for shipment was inactive and nominal at 9½c., carlots, exdock, prompt shipment.

Tanning Materials

Chestnut Extract—This market was quiet and quotably unchanged for all grades. Solid extract, 60 percent tannin was held at 8.727c. per pound, carlots, exdock, prompt shipment and 68 percent, powdered 9.817c., same basis.

Cutch—Trading was spotty, chiefly for nearby shipment. Offers for shipment were maintained at 7½c. per pound, carlots, exdock, prompt shipment.

Mangrove Bark—Trading was restricted to an occasional lot for nearby shipment. Primary market was unchanged and steady. African bark was quoted at $64 to $65 per ton, exdock, prompt shipment; Columbian, $55 per ton, and Ecuadorian, $52 same basis.

Myrobalans — While trading was slow, primary remained steady. Genuine J1's were quoted at $59 to $60 per ton, exdock, for prompt shipment; crushed J1's at $73 to $74, and Bombay, at $52 to $53, same basis.

Quebracho Extract—Offers for shipment were maintained at unchanged quotations. Trading was light and spotty. Solid clarified 64 percent was held at 10.8713c. per pound, carlots, exdock, prompt shipment and solid ordinary at 9.9228c., same basis.

Wattle—Buying interest continued restricted to nearby shipment. Offers for shipment for all grades were maintained at unchanged prices. Fair average was available at $80 per ton, exdock, prompt shipment and merchants, $74.50 per ton, same basis. East African extract, 60 percent, was held at 8.275c. per pound, exdock and South African extract, at 8.4c. per pound, same basis.

Petroleum Derivatives

Typical comments in vogue in the trade last week ranged from the "singin' the blues" variety to the more realistic approach to the general state of affairs in the market. But the week was not without its optimicisms. One source detected a slight tightening in benzene supplies due, as he said, to a variety of factors. Not the least among them was the fact that overseas shipments of the aromatic were up in September compared with previous months and the informed were pretty certain that a good deal more gallonage had flowed to foreign markets in October and November. Imports in September dwindled to less than a million and a half gallons, quite a comedown compared with August's better than five million. Once again, those in the know expect that October and November exports will approach the September level.

All considered, a major source said, aromatics inventories should not be as great at December's end as was once imagined in a more pessimistic moment.

Unfortunately, market observers do not speak as encouragingly about aliphatics business. According to a major source, buyers of these materials are more than cautious as many outlet industries strive to cut inventories to the marrow. Reportedly, the trade sales side of the paint industry will hit a low in the next few months.

What should amount to good news for LP-gas producers is that demand for these gases for fuel and chemical uses in September increased ten percent compared with September, 1956. It was said that last week's snow and colder weather should prove a spur to sales of these gases for home heating fuels and gasoline additives and help move the current inventory of 1,017 million gallons.

Business volume in partial aromatics, it was said, has not made substantial headway in the past month or two. While domestic demand has coasted along, import restrictions and the absence of gold coin in many exchequers abroad has posed barriers to foreign trading.

Price Trends

Advanced

Egg albumin, flake, 12c. per lb.
Yolk, 7c. per lb.

Reduced

None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
103.18	103.09	103.55	108.55

For Current Prices see page 9

Solvents and Diluents

Benzene—September saw a drastic drop-off in benzene imports. According to the Census bureau, 1,407,000 gallons were received at U. S. ports that month as opposed to August when imports totaled 5,943,261 gallons. Sources of the material were Canada and the USSR.

Pakistan, West Germany and Israel were the principal recipients of the 103,085 gallons of benzene shipped from the United States in September. Compared with export figures for the two months previous—83,734 in August and 28,617 gallons in July—this represented a sizable increase in foreign demand. Though Bureau of Census figures, of course, are not available, informed sources in the trade said that benzene shipments abroad were even more substantial in October.

One market observer saw a slight tightening in the benzene supply situation, and that was the optimistic note of the week.

Partial Aromatics—Business volume, a source said, has increased very little since early Fall. Principal outlets as the paint and coatings trades have continued to buy but not in great quantities. Also foreign sales have been hampered by import restrictions in many countries, the need for credit in still others.

Toluene—Canada was the single source of September toluene imports, reported by the Census bureau at 857,372 pounds. In the preceding month, our neighbor to the north shipped 68,144 pounds here. Canadian exports of toluene are indicative of the fact that the country is now self sufficient in the aromatics department and is looking for foreign markets, a source mentioned.

Since July when exports totaled 29,797,684 pounds, there has been a drastic decline in overseas shipments of toluene. By September, foreign call had dwindled to 4,536,467 pounds.

Xylene—Scarcely anything new can be said about this material. Market sources reported that demand is holding up but setting no records, with supplies ample. While rumors of price changes have been heard in the past, there was nothing being said in this department by major producers last week.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended November 23 totaled 283,139,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 282,086,000 barrels for the preceding week, this represents an increase of 1,053,000 barrels comprising an increase of 2,019,000 barrels in stocks of domestic crude and a decrease of 966,000 barrels in stocks of foreign crude.

LPG's

Daily average production of liquefied gas at refineries in September was 5.7 million gallons, 5 percent below that of a year ago, the Bureau of Mines reported. For the same month, the daily average production of liquefied petroleum gas at natural gasoline and cycling plants totaled 17.7 million gallons, increasing 3 percent over September, 1956.

The demand for LP-gases for fuel and chemical uses in September increased 10 percent compared to the same month last year. Stocks of these gases were 397 million gallons above a year ago and increased 15 million gallons during the month of September. Stocks of liquefied petroleum gases totaled 1,017 million gallons, of which 777 million gallons were stored underground.

Waxes

Trade sources are of the opinion that wax quotations will not change come the first of the year. If a new price schedule were imminent, they said, it would have been announced by now. Prices in this market normally move on a quarterly basis.

As far as demand is concerned, producers have no complaints. Steady call for both microcrystalline and paraffin has prevented the building up large inventories of these materials, a market source remarked. However, supplies were termed sufficient to fill all requirements.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended November 22, 1957, indicate an increase in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,832,000 barrels, an increase of 1,000 barrels from the preceding week. Daily average crude runs to stills of 7,699,000 barrels were 98,000 barrels below the preceding week, and 412,000 barrels below the week ended November 23, 1956. Runs of foreign crude amounted to 1,068,000 barrels daily, compared with 1,012,000 barrels in the preceding week. For the four-week period ending November 22, crude oil production averaged 6,793,000 barrels daily, and crude runs to stills averaged 7,654,000 barrels daily with runs of foreign crude averaging 993,000 barrels daily.

Petrolatum—From all accounts this market is in good shape supply and demand-wise. Sales, reportedly, have continued strong from a variety of industries where this material is used extensively. And no determined slackening in business volume is expected in weeks ahead. Price changes were said to be unlikely at the present time.

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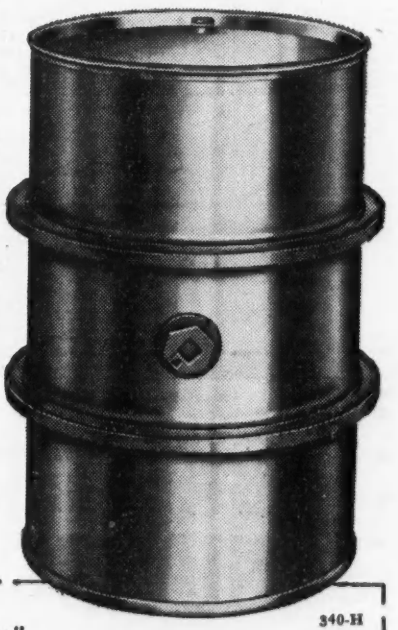

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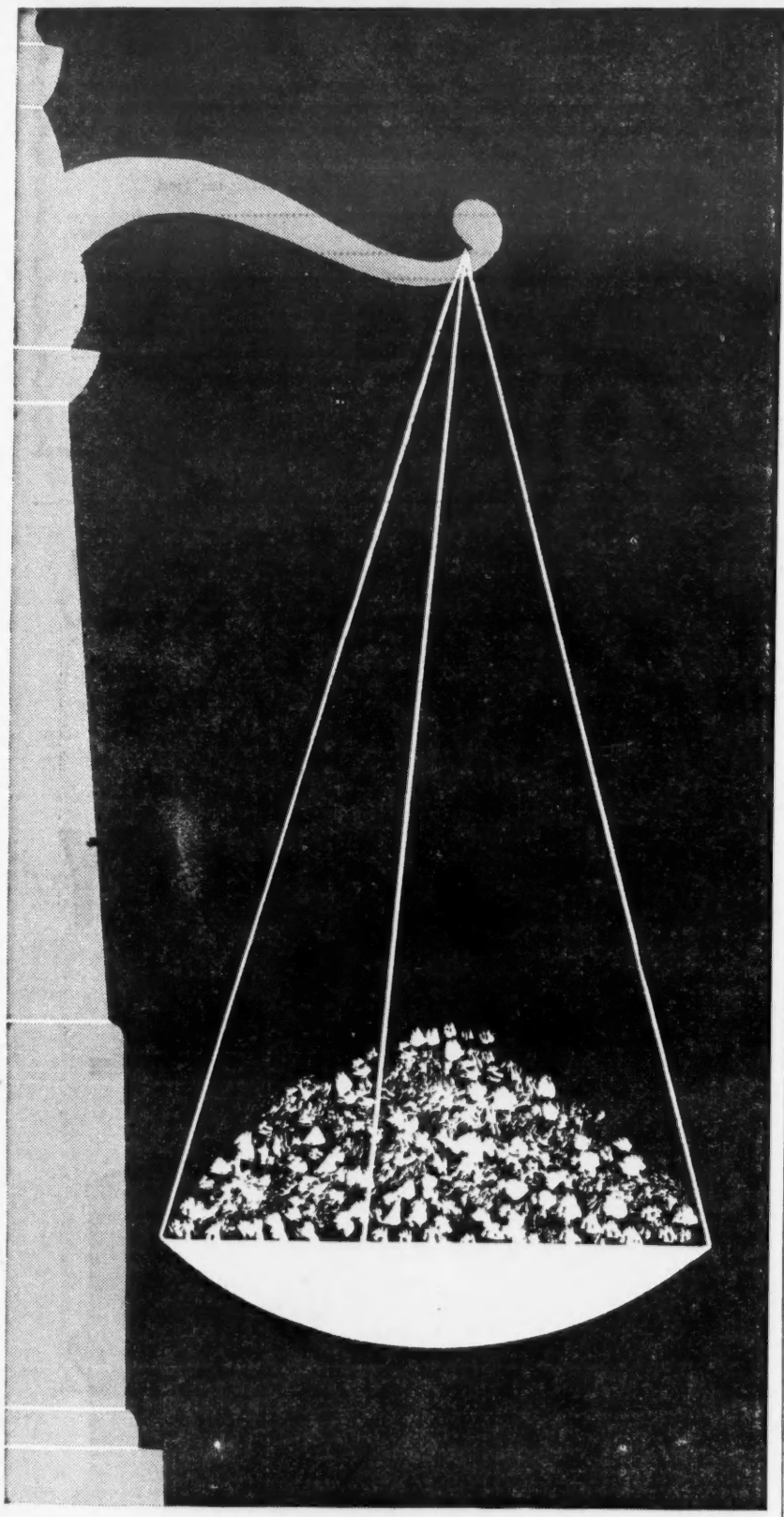

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Coal Chemicals

Producers reported several price changes to be effective January 1. A specialty grade of anthraquinone used in the electrical industry will be advanced 19 cents per pound. Anthraquinone used in the making of dyes remains unchanged. 2,4-Dinitroaniline will be increased 12 cents per pound. A commercial grade of p-phenylenediamine will be hiked 10 cents per pound. m-Nitro-p-toluidine was reduced 16 cents per pound, largely as a result of the competitive import situation which has developed in the market.

A producer reported a scheduled 2 cents per pound across the board advance on the price of technical acetanilide for January 1. Other producers had not acted on the price revision as yet.

Volume of light oils continued fair as consumers were in the process of year end inventory liquidation. Coke-oven sources contacted last week pointed out that one of the problems they were facing was the fact that coke-ovens were operating at close to one hundred percent of capacity which is disproportionate to the current rate of steel production and the business picture in general. Exports of toluene continued on the upgrade. Xylene was in good supply. Petroleum interest, in recent months, was said to center on some of the promising uses for separate isomers of xylene.

Price Trends

Advanced

None

Reduced

m-Nitro-p-toluidine, 16c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
118.17	118.19	118.19	115.56

For Current Prices see page 9

January 1 Price Advances

Acetanilide, technical, 2c. per lb.
Anthraquinone, electrical grade, 19c. per lb.
2,4-Dinitroaniline, 12c. per lb.
p-Phenylenediamine, commercial grade, 10c. per lb.

A healthy domestic pyridine market was reported. There are no shortages, it was said, but domestic price has firmed up considerably this year as can be shown by inactivity in the export market. Naphthalene market continues weak. Material is available in abundance from Europe and the Soviet bloc. Withdrawals of styrene monomer were routine. The price advantage of synthetic rubber for the export market was said to have been partially erased by the fact that natural rubber quotations have been edging downward.

American Iron and Steel Institute estimated that steel production in the week ended December 8 would amount to 72.0 percent of theoretical capacity equivalent to 1,843,000 net tons of steel. Output of steel was 1,846,000 net tons in the week previous, 1,996,000 in the comparable week one month ago and 2,493,000 tons in the corresponding week one year ago.

Basic Products

Aniline—Tariff Commission reports indicate that September imports of aniline oil and salts totaled 4,500 pounds as against 900 pounds in the comparable month last year. Total imports for the January through September period this year amounted to 8,215 pounds.

Benzene—Volume continued fair as consumers were in the process of year end inventory liquidation. Price was steady and unchanged from previous report. Some sources reported cokeovens continuing to operate at near 100 percent of capacity which is disproportionate to the current rate of steel production and the business picture in general. Thus, it appeared that the major problems confronting cokeoven operators were the high operation of cokeovens in the face of lagging steel production, the slackening in the business pace in general and inventory reductions on the part of consumers.

Imports of benzene from USSR during the month of September totaled 819,000 gallons valued at $436,170 for a per gallon value of 31c. Imports from Canada were 588,000 gallons valued at $182,220 for a per gallon value of 30.9c. Total imports in September amounted to 1,407,000 gallons with a value of $436,170. The 1.4 million gallon total for September compares with 4.1 million gallons imported in August and 3.2 million in July.

Cresols—Price structure was unchanged from the levels established October 1 of this year when drum differentials were increased. Carlot in drums price was increased ¼c. per pound while l.c.l. drum lots were upped ¾c. at that time. Tanks were unchanged. Trade sources contacted last week could see no significant changes in this market for the weeks immediately ahead. Trading was without feature.

Cresylic Acid—Trading followed a routine pattern last week. Demand for TCP grades continued poor since retention of light oils in the gasoline stream was said to have cut into the usage of TCP cresylic acids. Withdrawal for resins production was steady at a moderate volume. Imports of ADF cresols and cresylic acids in the first nine months of this year were 1.6 million gallons as against 2.6 million in the comparable period last year. Exports of coaltar acids in September, exclusive of cresylic, totaled 34,418 pounds.

Naphthalene — Several sources pointed out that although a surplus of naphthalene and creosote oils has been in evidence for many months, there was no indication of pressure on the domestic price. Sources looked for little change in conditions in this market for some time.

Toluene—Demand remains fair but insufficient to allow cokeoven operators to move total output. July exports amount-

Aromatics Foreign Trade: September

Following statistics are compiled from Census bureau reports. Units used by the bureau are retained in all cases. Attention is called to the fact that exports of toluene are reported in pounds while imports of ADF cresylic acid and cresols are in gallons. Imports of dutiable cresols and cresylic acid are listed in pounds.

	September 1957	September 1956	First Nine Months 1957	First Nine Months 1956
EXPORTS				
Benzene ..... gals.	103,085	32,740	1,478,694	**
Coaltar, crude and refined..... gals.	24,969	67,858	3,139,410	**
Creosote or dead oil..... gals.	59,194	70,269	1,698,627	**
Cresols and cresylic acids..... lbs.	667,264	836,703	5,393,965	**
Naphthalene, crude and refined..... lbs.	1,000	0	63,001	**
Phenol ..... lbs.	216,919	5,192,311	12,734,210	34,142,005
Phthalic anhydride..... lbs.	2,910,610	368,010	15,654,460	4,757,050
Pitch, from coaltar..... long tons	4,118	4,269	31,695	34,091
Toluene ..... lbs.	4,536,467	2,483,975	112,195,873	43,447,493
IMPORTS				
Benzene ..... gals.	1,407,000	2,629,760	41,895,069	48,890,836
Creosote and dead oil..... gals.	3,198,119	4,952,330	24,300,619	28,175,914
Cresols and cresylic acid, ADF..... gals.	126,701	232,191	1,644,707	2,517,989
Dutiable ..... lbs.	0	89,195	119,065	850,681
Naphthalene, melting point less than 79° C.. lbs.	5,504,432	8,580,725	60,672,338	64,052,981
Melting point 79° C and over..... lbs.	154,322	47,227	445,459	504,877

** Not separately reported in first six months of 1956.

Coal Chemicals

ed to 4,536,467 pounds valued at $175,715 for a per pound value of approximately 3.8c. equivalent to roughly 28½c. per gallon. Exports through September of this year have reached 112.2 million pounds as against 43.5 million pounds in the like period last year. Sources here quoted prices unchanged from last report. It was felt that the July reduction in toluene had not contributed to any reduction in producer inventories or contributed to the movement of extra gallonage in any way.

Xylene — Price was unchanged from those levels which have been established in the industry for many months. Trade sources indicated that overall consumption and distribution patterns had changed little during the past year. Petroleum interest, in recent months, was said to have centered on some of the promising uses for separate isomers of xylene. p-Xylene continued to find its major use in the production of terephthalic acid and dacron fibers and mylar films. Use of o-xylene as a raw material in the production of phthalic anhydride was said to depend largely on the fulfill-

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending December 8, was as follows:

Ammonium liquor	lbs.	717,109
Ammonium sulfate	lbs.	30,535,005
Benzene	gals.	2,729,644
Coaltar	gals.	13,416,896
Creosote	gals.	520,483
Naphthalene	lbs.	2,903,138
Pyridine (2°C)	lbs.	10,409
Toluene	gals.	601,447
Xylene	gals.	173,494

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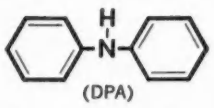

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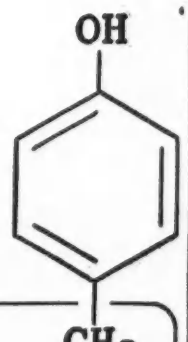

Typical Analysis

Purity	98+%
Freezing point	33.5°C.
Moisture	0.15%
Color of melt at 40°C.	1 Hellige
Specific gravity at 20/20°C.	1.035
Weight per gallon at 20°C.	8.6 lb.
Form	low-melting crystalline solid
Odor	phenolic and not sulfurous

Sales Information

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N057-7

Coal Chemicals

ment of projected market expansions for the latter material in the next decade. Presently, processing machinery for the production of phthalic is equipped to handle naphthalene which is more than adequate for current needs. m-Xylene was said to find good use as an insect repellent and as the raw material for making of isophthalic acid.

Intermediates

Acetanilide—A producer will increase prices 2c. per pound across the board on January 1. Under new schedules, price on acetanilide, technical, will be 32½c. in carlots and 33½c. per pound in less than carlot quantities.

Anthraquinone — Price on specialty grade material used in the electrical industry will be increased 19c. per pound, effective January 1. Increase will be from the currently held 91c. to $1.10 per pound. Price is for drum quantities, freight allowed. By far the bulk of market volume continues to be in antraquinone, 99.5 percent, used in production of dyes. Price on this material remains unchanged at 83c. per pound on carlot quantities and 86c. per pound l.c.l.

2.4-Dinitroaniline—Effective January 1, price will be increased 12c. per pound from 68c. to 80c. in drum lots. Material finds use in the production of dinitroaniline orange toner which will be increased 6c. per pound from $1.50 to $1.56.

Diphenylamine—Census bureau reported no export figures for September this year compared to exports during September of last year of 17,550. Foreign trade for the first nine months of the current year amounted to 880,725 pounds.

m-Nitro-p-toluidine—Material was reduced 16c. per pound from $1.59 to $1.43. Price revisions were said to have come about largely as a result of the competitive import situation which has developed in this market.

p-Phenylenediamine — Effective January 1, a commercial industrial grade material will be increased 10c. per pound from $1.30 to $1.40. Outlet for this grade was said to be small compared to refined powder which remains unchanged at $1.42 per pound.

Phthalic Anhydride — Market reports were essentially unchanged from previous weeks. Volume of phthalic was said to have been fairly well maintained this year. Exports continued to be substantially more than last year. Census bureau report shows 2.9 million pounds exported in September as against 368,000 in the comparable month last year. Exports for the first nine months of this year are 15.6 million pounds as against 4.7 million in the same period last year. A 1½c. increase was noted on some phthalate plastisizers (see Coatings Materials).

Rubber Chemicals—Price for accelerators was unchanged from last report. Last change in these markets was the 2c. per pound across the board advance of diphenylguanidine, di-o-tolylguanidine, mercaptobenzothiazole and mercaptobenzothiazyl disulfide in late October.

Census bureau reports indicate that exports of rubber accelerators of coaltar origin in September amounted to 236,680 pounds as against 343,730 pounds during the same month last year. Exports in the first nine months of this year totaled 2,790,748 pounds. September exports of rubber antioxidants of coaltar origin totaled 443,524 pounds as compared to 927,578 pounds in the comparable month last year. Exports for the nine months period this year were 5,237,898 pounds. Other coaltar rubber compounding agent exports totaled 256,720 pounds in September as against 158,280 during the month last year. Exports in the January through September period this year were 4,307,744 pounds.

Styrene Monomer — Market conditions were essentially unchanged last week. As yet, there was no indication as to what kind of an adjustment might be made on rubbermakers styrene at the first of the year. Contract escalation clauses on rubbermakers styrene provide for adjustments dependant on wages paid petroleum refining labor, cost of crude oil at the well and prices in the three major sections of the Wholesale Commodity Price index.

Styrene will find increased use with alkyd resins in styrenated oils and other surface coatings, it was said. Polystyrene for molded articles was in moderate demand while polyester resins were felt to have a good future in bonding fiber glass and other applications. These factors lead to an estimated US consumption of 1.5 billion pounds of styrene monomer in 1965. Sources pointed out that demand was off slightly but not significantly this year. Another factor is the squeeze felt on profit margins as a result of this summer's price reduction while cost factors continued to rise.

Chemists Making Almost

—Continued from page 7

that ten of the fly strains were three to seventy-two times as resistant to "Dipterex;" five strains were five to thirty-eight times as resistant to "Diazinon"; and seven were three to eighteen times as resistant to parathion.

In tests wtih poisoned baits, ten strains were thirteen to 105 times as resistant as normal flies to malathion, and four of these strains were three to nineteen times as resistant to "Dipterex."

Mr. Labrecque points out that in similar tests in 1954 and 1956, the resistance in these four strains to "Dipterex" or malathion baits did not exceed eight times normal.

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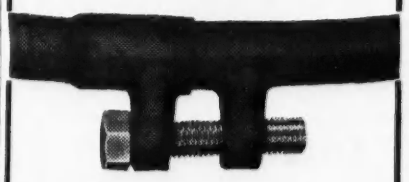

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Diphenhydramine Items To Go Over Counter

Diphenhydramine hydrochloride drug preparations may be offered for sale over-the-counter under an amendment to the "new drug" regulations being considered by Food and Drug Administration.

FDA announced that it has received a proposal to remove the items from the prescription-only requirements of the regulations.

Over-the-counter sales would be limited to preparations containing not more than 3 milligrams of diphenhydramine hydrochloride per milliliter. It would have to be labeled with adequate directions for use only by adults and children over six years of age, in the temporary relief of coughs due to colds.

Certain other labeling requirements would have to be met, such as the recommended dosage for adults and children, and warning statements against administration to children under six; exceeding the recommended dosage; use in the presence of high fever or persistent cough; and against driving a car or operating machinery while using the drug, since it may cause drowsiness.

Koppers Gets ICA Aid On Guatemalan Company

Koppers Company, Pittsburgh, Pa., has obtained a US government guaranty to protect its loan investment in Impregnadores de Madera de Guatemala, S.A., in Guatemala.

The newly-formed company will buy timber in that country, treat it with preservatives, and sell the treated, as well as untreated lumber products in Central America.

The government guaranty, issued through International Cooperation Administration, provides reimbursement to Koppers of $325,000 the company has lent to the new Guatemalan concern in the event it should be expropriated.

The money was advanced by Koppers to the new company to defray costs of machinery and equipment, timber and land purchases, and to provide engineering services.

Cancer Research

—Continued from page 5

developed, and to make certain that the discoveries are made freely available to the government and general public.

In a stepped up program to break down the barriers to development of a cancer cure, the Public Health Service through a recently organized Cancer Chemotherapy Research Center, has started enlisting the aid of the research facilities of drug and chemical manufacturers.

It is the first time that the department has gone outside of the normal research channels available through colleges and other non-profit research institutions to conduct research for the department. The magnitude of the program, however, made it necessary to go to manufacturers themselves for aid.

Screening Process

One part of the program is simply a screening process that will cover the thousands of drug and chemical products now available and being constantly developed by industry during normal research work. They are being screened for their cancer cure potentials. The other part of the program is research for new products with the definite aim of discovering a cancer cure.

Because the program involves both patented and unpatented compounds, it became encumbent upon HEW to make clear the exact rights of all parties involved to the results of the research. As a result of conferences and extended communications with the drug and chemical companies, a draft of a new patent policy was drawn up by the department last September and circulated among interested firms.

The department has now decided to adopt this draft with a few minor changes as its basic patent policy relative to all research contracts. The research contracts issued by the HEW will also contain provisions relating to some applicable portion of the basic policy statement.

National Distillers

—Continued from page 5

of Panhandle, stated that the expansion of National Petro beyond the original plan makes the full acquisition by National Distillers, which has operated the company since organization, a desirable step and provides Panhandle Eastern with further diversification.

As originally conceived, Petro's basic raw material was hydrocarbon extracted from Panhandle's natural gas pipeline at Tuscola. The new polyethylene plant in Houston, however, will use ethylene purchased from another source.

Ammonia Gains Predicted On Eve of Institute Parley

Agricultural use of ammonia for the year ended June 30 may have surpassed the 460,000 tons used the previous year. This is the prediction of Jack F. Criswell, executive vice-president of the Agricultural Ammonia Institute.

Mr. Criswell makes this prediction on the eve of the institute's annual convention and trade show, to be held at Little Rock, Ark., this week.

At the meeting, producers, distributors, equipment manufacturers and users of ammonia will discuss new technology and uses in a series of forum discussions presided over by leaders in the industry.

Mr. Criswell says that use of ammonia this year should approximate 25 percent of the total nitrogen used for direct application. In 1950, the total used was less than 72,000 tons.

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Drugs, Fine Chemicals

Producing plants for aspirin continued to work at peak levels or close to it in order to fill the heavy demands which have piled up in recent weeks. Sources indicated they were no longer backloging orders but that operations were continuing at peak levels all down the line as tableters sought to fill the pipelines to drug outlets. A wider inquiry last week revealed that major producers felt that acetophenetidin supplies were in balance with demand. General feeling was that makers of APC tablets were getting the aspirin they needed for tableting operations. At the same time, other sources pointed out that getting the aspirin needed was something different from getting the aspirin buyers would like to have on hand. It was said that a free position on acetophenetidin might be peculiar to a reseller's position.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(1926=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
63.22	63.22	63.22	65.26

For Current Prices see page 9

Antibiotics markets were steady and unchanged from the reports of the past several weeks. A good seasonal upturn in demand has been noted during the fall months. Stocks appeared adequate, it was said, and major producers were carrying comfortable inventories. Export traffic in dihydrostreptomycin during the month of September was up 5.7 million grams over the previous month, according to report of the Census bureau.

Vitamins markets were unchanged, pricewise, after the reductions on pyridoxine hydrochloride and b-carotene three weeks ago. Ascorbic continued to move in good volume and producers pointed out that intensive promotion of diversified markets was becoming of increasing importance in this as well as in other vitamin markets. B-complex vitamins for food fortification and in the feed supplement industry continued to form a growing market. Production volume has been maintained this year on the entire list and in most cases expanded as shown from Tariff Commission reports. With the expansion of markets and large scale production substantial vitamin price reductions have been made possible this year.

Bismuth salts and mercurials markets were quiet. Prices of longstanding were unchanged. The downward trend in mercury metal during the past five months has not been reflected in mercurials salts and trade sources felt that no revisions were in order. Withdrawals of bromides were routine for use in analgesic and antipyretic preparations. There was no pressure in these markets as has been the case with aspirin and, at times, sodium salicylate.

Per pound value of caffeine imports moved from $2.11 in August to $1.67½ in September.

Acetophenetidin — Reports from trade sources were mixed. Generally, it was felt that trade need was balanced with supply. Demand was good but not pressing as in the case of aspirin. Bulk producers felt that makers of APC tablets were getting the aspirin they needed for tableting operations. Any free position on acetophenetidin, it was felt, might be peculiar to a reseller's position and not indicative of overall industry conditions. Price was unchanged from previous report.

Aspirin—Producing plants were still moving at peak levels or close to it in order to fill the heavy aspirin demands which have been made during the past several weeks. Producers were not backloging orders but operations continued at capacity all down the line. Storage space for the bulk product was at a premium with some tableters as they were working overtime to fill the pipelines with finished products for drug outlets. Wider inquiry last week brought out the general feeling in the industry that makers of APC tablets were getting the aspirin they needed. However, it was pointed out that getting what they needed was something different from getting what they would like to have on hand. It was felt that aspirin production might run well over the 17 million pounds previously estimated for this year. Exports of aspirin in the month of September amounted to 87,460 pounds as against 140,698 pounds in the previous month. Exports of analgesic and antipyretic materials for September were 45,746 pounds compared to 52,418 in August.

Antibiotics—There was little change in overall trading conditions from reports of two weeks ago. Stocks were adequate, demand seasonally active. A good upturn has been noted in antibiotics sales during the past several weeks. Exports of bulk and dosage forms of streptomycin in September totaled 2,446,274 grams as against the 3,181,570 grams exported in the previous month. Dihydrostreptomycin exports in September were 13,090,202 grams as compared to 8,750,195 grams in August. Exports of penicillin salts, bulk and dosage forms, were 50,308,796 million Oxford units in September as against 84,413,112 million units in the previous month. Other antibiotics in foreign trade in September totaled 8,251,738 grams as compared to 12,809,299 grams in August.

Ascorbic Acid — Demand and supply were maintained in good balance, it was said. Material continued to move in good quantities and intensive promotion of diversified uses for Vitamin C was felt to be of growing importance to producers in the race for the substantial volume of business available. Report of the Census Bureau for September indicates that exports of ascorbic acid during the month amounted to 45,673 pounds as contrasted with 26,387 during August. Exports of ascorbic acid for the May through September period of this year were 158,562 pounds. Price was unchanged from the $10 ped kilo level established in early November.

Bismuth Salts — Market was quiet. Stocks were adequate for current trade needs with subsalicylate and subnitrate most active. Prices were unchanged from quotation of longstanding.

Bromides — Stocks were adequate for current demand. Producers indicated that withdrawals of bromides have been on a routine level in recent weeks. A slight seasonal upturn has been noted in outlet to the pharmaceutical industry but nothing to compare with the pressure on aspirin and the movement of some of the salicylates. Exports of bromides in September, including bromates and the raw material bromine, amounted to 1,181,785 pounds, valued at $322,353.

Caffeine—Census Bureau reports indicate that imports from West Germany in the month of September were 62,046 pounds with a value of $103,942 and a per pound value of $1.67½. In the previous month imports amounted to 76,348 pounds valued at $162,461 for a per pound value of $2.11. Demand was good for caffeine going into antipyretic and analgesic preparations in the pharmaceutical industry.

Iodine—Preparations and tinctures used in the pharmaceutical industry were in routine demand. Stocks were entirely adequate for current demand. Trade sources contacted felt that overall distribution patterns had not changed appreciably in recent years. Census bureau reports indicate that imports of crude iodine in September amount to 350,883 pounds as against 65,123 in the previous month and 1,259,618 pounds in the May through September period. Withdrawals for use in preparations containing roughly 25 parts per million of iodine for cleaning and sanitizing equipment used in dairy plants, hospitals and food processing plants were steady.

Menthol—Imports of menthol in September amounted to 52,933 pounds with a value of $295,385 for a unit value of $5.58 per pound. Imports of synthetic during the month were 7,891 pounds. Mentholated products have continued to attract good interest in the pharmaceutical industry. Price was a shade weaker in view of recent substantial shipments from primary centers. Imports of May through September totaled 214,589 pounds.

Mercurials—Market was very quiet. No change was anticipated by trade sources.

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Drugs, Fine Chemicals

Mercury metal changes have not been reflected in mercurials prices and feeling in the pharmaceutical industry was that there would be no price revisions.

Methionine — Sources contacted last week quoted pharmaceutical grade methionine at $3.50 per pound, fifty pound lots or more, freight allowed. Feed grade material, same basis, was listed at $2.45 per pound. By far the bulk of the market continues to be in feed grade material. As the only sulfur containing essential amino acid methionine continues to be widely used in the feed industry as a protein supplement to promote growth and health in livestock and poultry.

Pyridoxine Hydrochloride—Price was firm at 24½c. per pound after the 5c. per gram reduction on B_6 of two weeks ago. Tariff Commission figures indicate that production in September amounted to 3,639 pounds as against 2,644 pounds in the previous month and 3,967 in September of last year. Supplies were adequate, demands at a moderate pace.

Silver Nitrate — Production during the month of September amounted to 5,573 ounces as against 5,590 in the previous month and 5,725 in the comparable month last year. End of month stocks at producing plants in September were 3,491 ounces as compared to 3,606 ounces at the close of August. Prices on the salts were steady despite recent minor fluctuations in silver bullion.

Sodium Alginate—Trading was routine. Report of the Census bureau indicated that September imports of sodium alginate amounted to 21,000 pounds as compared to 12,120 in August and 35,900 in the peak month of July.

Sulfonamides—Foreign trade in September amounted to 66,403 pounds as against 40,472 pounds of sulfonamides exported in the previous month and 37,630 pounds during July. Markets continue to show good tone and a moderate seasonal upturn in recent weeks. Supply and demand were in good balance, it was said. Producers indicated that inventories were comfortable.

Tartaric Acid—Imports in September were down to 54,015 pounds as compared to 174,274 pounds in the month previous and 218,806 pounds during the month of July. Domestic price levels were unchanged according to reports of last week. Market was seasonally active. With drawals have been largely routine on the entire line this year. Supplies have been in balance with trade needs, it was said. Last price change in these markets was the October, 1956, across the board advance of 2c. per pound on most tartrates. The usual exception was tartar emetic which moved up 4c. per pound at that time.

Thiamin—Market was seasonally active with good quantities of B_1 moving to pharmaceutical and food industry outlets. Exports in September were reported by the Census bureau at 5,977 pounds as against 6,184 in the previous month and 32,226 pounds in the May through September period of this year. Price was unchanged and steady at $40 per kilo for both hydrochloride and mononitrate.

Vitamins—Withdrawals were steady in the face of a good seasonal demand. Last price revisions in these markets occurred three weeks ago when Vitamin B_6 and b-carotene were reduced 5c. and 6c. per gram, respectively. Reports of the Census bureau show that imports of vitamins and vitasterols of animal origin in September amounted to 140 pounds while imports of vitamins of other origin during the month were 28,874 pounds, the bulk of which was a 24,592 pound shipment from the Netherlands.

Exports in September of Vitamins A and D amounted to 29,567 pounds while export of B-complex vitamins, exclusive of thiamin and B_{12}, totaled 237,186 pounds. Vitamin exports not elsewhere classified accounted for an additional 19,384 pounds exported during the month.

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Botanicals

Buying activity was slow to recover following the Thanksgiving holiday. Botanicals price listings were steady with few price revisions having been recorded, it was said, during the past month. Large volume domestic items such as wild cherry bark and white pine bark continued moving in fair volume to outlets in the pharmaceutical industry, according to reports from most dealers. Prices on wild cherry bark, thin natural, were weaker with material being listed at 18 cents per pound while rossed continued to be quoted at 21 cents. Wahoo root bark encountered moderate demands. Material was readily available and price had weakened somewhat from last report. Dealers here quoted the material at $2.10 per pound. Prices on Tinnevelly senna leaves were firmer with all grades quoted 2 cents to 3 cents higher. Pods listed at 28 cents per pound. Alexandrian senna leaves were steady and unchanged at previous quotations. Stocks were balanced with demand.

Rauwolfia Serpentina Root — Trading was dull and listless in this market. Price was quoted at $1.50 per pound. Stocks were adequate for the modest demands currently being made.

Senna Leaves—Alexandrian whole and half listed at 19c. per pound while siftings were 17c. Tinnevelly was firmer with number one quoted in a range of 19c.-20c. while number two was 16c.-17c. per pound and number three was 14c. per pound. Powder was 17c. and pods were

Oilseeds, Cake and Meal Output: October

Statistics on the production of cake and meal and oilseeds crush have been compiled by the Bureau of Census, Department of Commerce, for the month of October. The data are as follows:

Oilseeds Receipts and Crush

	Tons		
	Receipts	Crushings	Stocks Oct. 31
Castor beans	3,946	1,683	3,499
Copra	37,868	32,627	15,065
Corn germs	28,479	29,221	1,119
Cottonseed	1,139,754	645,936	912,009
Flaxseed	78,866	76,434	106,230
Olives	[3]	[3]	[3]
Peanut [2]	N. A.	N. A.	N. A.
Soybeans	2,653,638	842,509	2,002,236
Tung nuts	[3]	[3]	[3]
Other	[3] 4,388		16,963

Production of Oil Cake and Meals

	Tons		
	Production	Shipments and Transfer	Stocks Oct. 31
Cottonseed cake and meal	299,826	259,656	249,383
hulls	136,097	108,863	77,319
linters [4]			
First cut	46,597	28,837	81,309
Second cut	135,110	106,370	149,029
Mill run	17,625	8,413	21,758
Total	199,332	143,620	252,096
hull fiber	1,392	1,344	1,039
motes and grabbots	1,461	614	1,846
Soybean cake and meal	652,251	648,344	58,636
flour	10,295	10,728	1,624
lecithin	1,467	N. A.	1,330
Other cake and meal—			
Castor bean	912	3	1,205
Copra	11,437	11,241	900
Corn germ	13,058	13,135	607
Flaxseed	50,887	44,312	70,261
Olive	[5]	[5]	[5]
Peanut [6]	N. A.	N. A.	N. A.
Tung nut	[5]	[5]	[5]
Other	3,696	5,875	8,588

N. A.—Not Available.
[1] Included in "other" to avoid disclosure of figures for individual companies.
[2] Data on peanuts collected by Agricultural Marketing Service, Department of Agriculture, and include reports by peanut shellers.
[3] Not shown to avoid disclosure of figures for individual companies.
[4] Average gross bale weight in pounds for October production: Total, 621.0; first cut, 605.9; second cut, 626.0; and mill run, 623.3.
[5] Included in "other" to avoid disclosure of figures for individual companies.
[6] Data collected by Agricultural Marketing Service, Department of Agriculture.

Drugs, Fine Chemicals

quoted at 28c. per pound. Stocks were in balance with current demand. Sources contacted noted a firming of prices at primary centers.

Wahoo Root Bark — Stocks were adequate for trade requirements, according to trade reports of last week. Price was steady at $2.10 per pound. Trading was routine.

Wild Cherry Bark—Demands in the pharmaceutical industry were seasonally active with good quantities moving to consumer channels for use in cough and cold medications. Preference in the trade was said to be for thin natural rather than rossed. It was pointed out however that both conform to USP specification. Price was steady, stocks adequate as a result of the good collections attained over the summer.

Thin, natural was a shade weaker at 18c. per pound while thin, rossed continued to list at 21c. per pound.

Yerba Santa Leaves — Material was quoted unchanged ranging from 40c.-42c. per pound. Market was quiet.

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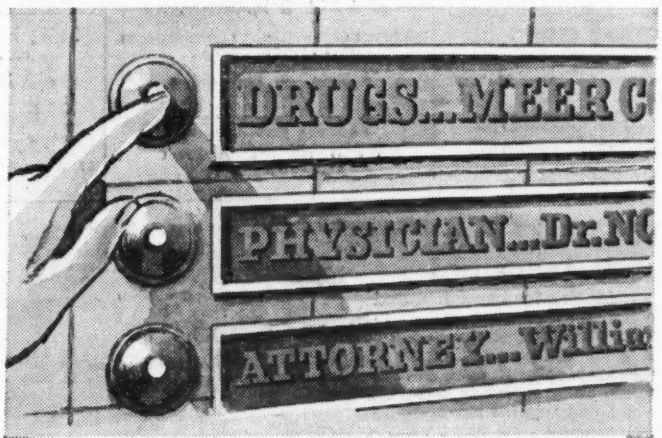

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Alcohol Formula Change Legislation Is Announced

Internal Revenue Service has announced a change in its regulations relating to formulas for denatured alcohol.

The amendments will permit the use of rubber hydrocarbon solvent as a substitute for gasoline in proprietary solvents formulations and will require bay rum, alcoholado, or alcoholado type toilet waters made with specially denatured alcohol to contain 32 grains of tartar emetic or 0.5 ounces of sucrose octaacetate in each gallon of finished product. The change in the regulations becomes effective February 1, 1958.

Wyoming Governor Heads Oil Compact Commission

Gov. Milward L. Simpson of Wyoming last week was elected chairman of the Interstate Oil Compact Commission. The Wyoming governor will serve during 1958, succeeding Gov. Raymond Gary of Oklahoma.

Jake Jacobsen, IOCC official representative from Texas, was elected first vice-chairman of the commission. James C. Hamill, IOCC official representative from Oklahoma, was elected second vice-chairman. Earl Foster of Oklahoma City was re-elected executive secretary.

Searle Has New Tranquilizer

G. D. Searle & Co., will introduce "Dartal," a new tranquilizer, to the trade next Monday and begin moving it to the medical profession early in 1958. The new drug, for which the maker claims tranquilizing effects without sedation, is thiopropazate dihydrochloride.

Current Market Quotations

—Continued from page 37

Wheat germ oil, o-gal. dms gal. 11.25 - —
Wheat starch (see Starch, wheat).
White lead (see Lead, white)
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb. .18 - .19
White precipitate, USP, powd. dms., lb 6.55 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .18 - —
Thin, rossed, bls lb. .21 - —
Wintergreen oil, USP, nat., northern, cns lb 6.35 - 10.30
USP, nat., southern, cns lb. 3.75 - 4.10
Wintergreen oil, synt. (see Methyl salicylate).
Witch hazel bark, bls lb. 16 - .17
Witch hazel leaves, bls lb. .22 - —
Wollastonite, fine, bgs., c.l., works, ton 39.50 - —
bgs., l.c.l., ex whse ton 56.00 - —
Medium, bgs., c.l., works ton 27.00 - —
bgs., l.c.l., ex whse ton 44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs lb. 4.25 - 4.50
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns. lb. 5.50 - —

X

Xylene, coaltar, indust., tanks, works—
Bethlehem, Pa. gal. .34 - —
Birmingham dist. gal. .32 - —
Chicago, dist. gal. .34 - —
Cleveland dist. gal. .34½ - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Middletown, Ohio gal. .34 - —
Minnequa, Colo. gal. .34 - —
Philadelphia dist. gal. .34 - —
Pittsburgh dist. gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind. gal. .34 - —
Youngstown, Ohio gal. .32½ - —
Xylene, petroleum, indust., tanks, works:
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .34 - —
Houston, Tex. gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .34 - —
Wood River, Ill. gal. .34 - —
Xylenol, cryst., 60°-62° C., m.p., dms., l.c.l., works lb. .40 - —
Cryst. 56°-53°C., m.p. dms., l.c.l., works, frt. equald lb. .33 - —
dms., l.c.l., same basis lb. .23 - —
Xylenol fraction, b.r. 7°-9°C., dry above 227°C. dms., c.l., same basis gal. 1.25 - —
dms., l.c.l., same basis gal. 1.30 - —
tanks, same basis gal. 1.05 - —
Xylenol fraction, b.r. 7-9°C., dry at or below 227°C., dms., c.l., same basis gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
Xylidines, mixed o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .38 - —

Xylol

Xylol quotations, both coaltar and petroleum, may now be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 2.65
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb. 27 - —
Dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. 47 - —
Yeast, brewers, dry, USP, 90 Int'l B units per gram, 100-lb. dms lb. .52 - —
200 Int'l B units per gram, 100-lb. dms lb. .6 - —
300 Int'l B units per gram, 100-lb. dms lb. .60 - —
Torula, USP, dlvd. lb. .18 - —

Yellow Pigments

Yellow pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. lb. .42 - .42
Ylang-ylang oil, Bourbon, bots lb. 19.00 - 25.00
Ylang-ylang oil, Bourbon, extra, bots lb. 28.00 - 40.00
Madagascar, bots lb. No Stocks.
Yohimbine hydrochloride, bots, tins, oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, lb. .38 - —
bgs., 1,000 to 36,000-lb. lots, works, lb. .40 - —
bgs., smaller lots, works lb. .43 - —
Zinc acetate, NF, VIII, dms. lb. .53 - —
Tech., dms., works lb. .29½ - .29¾
Zinc borate, bgs., c.l., dlvd. E lb. .192 - —
bgs., l.c.l., dlvd. E lb. .202 - —
Zinc chloride, NF, gran., dms lb. .42 - —
Precip., powd., dms. lb. .26 - —
Soln., 50%, dms., c.l., works, 100 lbs. 5.80 - —
dms., l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
Zinc chloride, tech., fused, dms., c.l., works 100 lbs. 10.70 - —
dms., l.c.l., works 100 lbs. 11.20 - —
gran., fib. dms., c.l., works, 100 lbs. 11.43 - —
fib. dms., l.c.l., works 100 lbs. 11.95 - —
Zinc chromate, bbls., dlvd. lb. .29 - —
Basic, bbls., dlvd. lb. .34 - —
Zinc cyanide, dms. 1,000-lb. lots or more, works lb. .55 - —
dms., smaller lots works lb. .57 - —
Zinc dust, coml., bbls., c.l., works lb. .1360 - —
Pigment, bbls., c.l., works lb. .14 - —
bbls., l.c.l., works lb. .15 - —
Zinc fluoride, bbls., works lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld. lb. .21½ - —
dms., l.c.l., frt. alld. lb. .23½ - —
Zinc metal, prime western slabs, E. St. Louis lb. .10 - —
Prime western, slabs, New York, lb. .10½ - —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld lb. .24½ - —
10% Zn, dms., frt. alld. lb. .30 - —
Zinc nitrate, tech., cryst., bbls., works lb. .20 - —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½ - —
bgs., l.c.l., same basis lb. .15½ - —
leaded, 35%, bgs., c.l., mills, frt. alld lb. .15½ - —
bgs., l.c.l., same basis lb. .16½ - —
50%, bgs., c.l., same basis lb. .15⅞ - —
bgs., l.c.l., same basis lb. .16⅞ - —
Zinc oxide, French process, green seal, bgs., c.l., mills, frt. alld lb. .15¾ - —
bgs., l.c.l., same basis lb. .16¾ - —
red seal, bgs., c.l., same basis lb. .15¼ - —
bgs., l.c.l., same basis lb. .16¼ - —
white seal, bgs., c.l., same basis, lb. .16¼ - —
bgs., l.c.l., same basis lb. .17¼ - —
USP, ctns. c.l., frt. alld lb. .17¼ - —
ctns., l.c.l., same basis lb. .18¼ - —
Zinc oxide Pac. Coast prices 1c. higher.
Zinc phenolsulfonate, NF, gran., dms lb. .43 - .44
NF, powd., dms. lb. .46 - .53
Zinc resinate, precip. 7.2-7.6% Zn, dms., frt. alld lb. .29 - —
Zinc silicofluoride, dms., works lb. .12½ - .14
Zinc stearate, tech., USP, ctns., c.l., lb. .41 - —
ctns., l.c.l. lb. .42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E 100 lbs. 8.75 - —
bgs., l.c.l., dlvd. E 100 lbs. 9.75 - —
USP, gran., dms., lb. .26 - —
Zinc sulfate in bbls. 40c. higher
Zinc sulfide pure, bgs., c.l. dlvd lb. .2530 - —
Zinc undecylenate, dms. lb. 2.00 - —
Zinc yellow (see Zinc chromate)
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works 100 lbs. 10.85 - —
bbls., l.c.l., works 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate basic, dms., c.l. lb. .25½ - —
dms., l.c.l. lb. .26 - —
Zircon (G), gran., bgs., c.l., works, lb. .03½ - —
Zircon (G), gran., bgs., 5 tons to c.l., works lb. .03⅜ - —
bgs., 1 ton to 9,999-lb. lots, works lb. .04 - —
bgs., smaller lots, works lb. .06½ - —
Zircon (G), milled, bgs., c.l., works, lb. .04¼ - —
bgs., 5 tons to c.l., works lb. .04⅜ - —
bgs., 1 ton to 9,999-lb. lots, works lb. .04⅝ - —
bgs., 500-1,999-lb. lots, works lb. .07½ - —
Zircon (G) in barrels 1c. higher
Zirconium acetate, 13% soln., ZrO, c.l., 30,000 lbs. minimum, works lb. .23 - —
Zirconium hydride, powd., dms., works lb. 7.25 - 9.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works lb. 1.50 - —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works lb. .45½ - —
bgs., smaller lots, works lb. .48 - —
Electric-fused, milled, bgs., c.l., works lb. .59 - —
bgs., 5-ton lots, works lb. .59½ - —
bgs., 1-ton to 9,999-lb. lots, works lb. .60 - —
bgs., 500 to 1,999-lb. lots., works lb. .60½ - —
bgs., smaller lots, works lb. .63 - —
Glass polishing grade, 94-97% ZrO., bgs., works lb. .55 - .65
Opacifier grade, 85-90% ZrO., bgs., lb. .27 - .50
Stabilized oxide, 91% ZrO., milled, bgs lb. .62 - .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works lb. .35½ - —

Oil Position Filled

Charles A. Nichols, jr., for thirty years associated with Standard Vacuum Oil Company, has been appointed foreign petroleum coordinator in the Office of Oil and Gas of the Department of the Interior. Mr. Nichols will succeed Ralph S. Fowler, who has become petroleum consultant to the director of the Office of Defense Mobilization.

Data Offered

National Aniline Division, Allied Chemical & Dye Corporation, 40 Rector street, New York 6, is offering without charge technical bulletin I-20 on "Naxol" **cyclohexanol.** The thirty-two-page bulletin contains ten pages of physical and chemical properties, and describes and illustrates all principal reactions. It also provides eleven pages of suggested uses. Included, too, is a comprehensive bibliography of 266 literature references.

A fifty-six-page brochure published by Rohm & Haas Company, Washington Square, Philadelphia 5, gives detailed summaries and tables covering the firm's findings in an extensive "every-climate" **test program on acrylic emulsion paints.** Entitled "Progress Report Four," it is the fourth in a series published annually since acrylic emulsions were first introduced to the paint industry in 1953. Summaries, photos and extensive tables describe results obtained to date from 3,000 test exposures in Florida, Pennsylvania and Arizona begun in 1952 and 1953, as well as data from a variety of laboratory-controlled test buildings and from a systematic study covering a large number of commercial paint applications on buildings in every climatic region of the United States.

An informative, eleven-page technical bulletin reviewing the use of **"Diamond Precipated Calcium Carbonates in Neoprenes"** has been issued by the silicate, detergent, calcium division of Diamond Alkali Company, 300 Union Commerce Building, Cleveland 14, Ohio. Prepared expressly for compounders of synthetic rubber products, the bulletin illustrates the range of properties obtainable with Diamond precipitated calcium carbonates when used as fillers in neoprenes. Data given included basic formulations of Neoprene GN and Neoprene W.

Amoco Chemical Corporation 910 South Michigan avenue, Chicago 80, is offering on request a twenty-four-page **product brochure** which describes the company's line of petrochemicals.

A twelve-page booklet entitled **"Powdered Activated Nuchar for Purification and Reclamation"** may be had free of charge by writing West Virginia Pulp & Paper Company's industrial chemical sales division at 230 Park avenue, New York 17.

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AGAR—20 bls, Max Van Pels, Kobe
48 bbls, Peoples National Bank, Bilbao
20 dms, T M Duche & Sons, Rotterdam
20 bgs, Casablanca
50 dms, Casablanca

ALUMINUM SULFATE—600 bgs, C M C Chemicals Inc, Liverpool

AMINOPYRINE—20 dms, Progressive Color & Chemical Co, Hamburg

AMMONIUM BICHLORIDE—30 cks, Lo Curto & Funk, Liverpool

ANILINE DYES—5 cks, Francolor Inc, Havre
11 dms, Putnam Chemical Corp, Hamburg
63 dms, Hensel Bruckmann & Lorbacher, Hamburg
3 dms, Heemsoth Kerner, Liverpool

ANNATTO SEED—140 bgs, Marcel Calvet, Callao
200 bgs, M J Golombeck, Rio de Janeiro
64 bgs, Progreso

ANTIMONY—60 kgs, Watson Geach, Liverpool

ANTIMONY OXIDE—71 bgs, C Gitlan, Antwerp

ARGOLS—293 bgs, Tartaric Raw Materials, Lisbon

ASBESTOS FIBER—4,000 bgs, Johns Manville Corp, Lourenco Marques
1,400 bgs, North American Asbestos Corp, Lourenco Marques

BARIUM SULFATE—250 cs, Picker X-Ray Corp, London

BEEF EXTRACT—100 cs, Buenos Aires

BEESWAX—25 bgs, Porcella Vicini & Co, Puerto Plata
34 bgs, Curacao Trading Co, Ciudad Trujillo
16 bgs, Frank B Ross, Tampico
30 bgs, Puerto Plata

BENZOIN GUM—10 cs, Bangkok
20 cs, Singapore

BERGAMOT OIL—11 dms, Genoa

BILE, OX—21 dms, Wilson & Co, Santos

CADMIUM COLORS—2 dms, General Cable Corp, Liverpool

CALCIUM CARBONATE, PRECIPITATED—500 bgs, H J Baker & Bro, Liverpool

CALCIUM LACTATE, ANHYDROUS—28 dms, Gallard Schlesinger, Rotterdam

CALCIUM OXIDE—10 dms, Rotterdam

CAMPHOR—83 cs, M Farris & Co, Keelung

CARAWAY SEED—200 bgs, C M Van Sillevoldt, Rotterdam
150 bgs, R J Spitz, Rotterdam
300 bgs, Ideal Trading Co, Rotterdam
200 bgs, Louis Furth, Rotterdam
300 bgs, Rotterdam

CARBON FERROMANGANESE—127 dms, Chase Manhattan Bank, Yokohama
127 dms, D C Andrews, Yokohama

CARDAMOM—22 cs, Wm E Martin & Sons, Colombo
22 cs, Karl H Landes & E Balint, Colombo
7 cs, Kellys America Ltd, Puerto Barrios

CASEIN—650 bgs, Cone-Close Co, Buenos Aires

CASHEWNUT SHELL LIQUID—100 tons, Fidelity Union Trust Co, Mangalore
100 tons, Irvington Varnish Insulator Co, Mangalore

CASSIA—250 bls, Allard & Co, Saigon
3,258 bls, Rotterdam

CASTOR BEANS—1,667 bgs, Baker Castor Oil Co, Salvador
11,583 bgs, D Levin, Salvador
2,500 bgs, Bahia Ceras Products, Salvador

CASTOR OIL—300 tons, George Degen & Co, Santos
300 tons, Woodward & Dickerson, Salvador
470 tons, Baker Castor Oil Co, Bombay
350 tons, Recife

CELERY SEED—43 bgs, Hismoco American Co, Bombay
10 bgs, Wm Allison & Co, Marseille

CINNAMON QUILLS—75 bls, Chase Manhattan Bank, Colombo
30 bls, Max Van Pels, Colombo
50 bls, Delano Corp of America, Colombo
150 bls, Fritzsche Bros, Colombo
50 bls, Manufacturers Trust Co, Colombo

CITRONELLA OIL—20 dms, Olson Importing Co, Hong Kong
20 dms, Consumers Import Co, Hong Kong
125 dms, P H Petry, Hang Kong
80 dms, George Uhe Co, Hong Kong
25 dms, Ungerer & Co, Hong Kong

COALTAR DYES—20 dms, L & R Organic Products Co, Rotterdam
2 dms, Natural Nydegger, Rotterdam
3 dms, Hensel Bruckmann & Lorbacher, Hamburg

COBALT POWDER—10 dms, C Hardy, Havre

COCONUT OIL—370 tons, Manila

COD OIL—100 dms, Brown Bros, Bremen

CODLIVER OIL—301 dms, Albumina Supply Co, Lisbon

COPPER CYANIDE—60 dms, D Hauser, Hamburg

CORIANDER OIL—7 cs, Flora Essential Oils Co, Antwerp
1 dm, Rotterdam

CORIANDER SEED—200 bgs, S B Penick & Co, Casablanca

CORN STARCH—230 bgs, Universal Transcontinentale Co, Rotterdam

CUTTLEFISH BONE—100 cs, Yokohama

DAMIANA LEAVES—95 bgs, F D Keller & Son, Tampico

DAMMAR GUM—28 bgs, France Campbell & Darling, Singapore
50 cs, Bangkok

DEXTRIN—525 bgs, Guaranty Trust Co, Rotterdam
150 bgs, Rotterdam

DILL SEED—79 bgs, Levy & Levis Co, Bombay

DOGWOOD BARK—50 bls, Lydia E Pinkham, Kingston
200 bgs, Lydia E Pinkham, Kingston

EARTH COLORS—42 bbls, J Lee Smith, Bremen
200 bgs, J Lee Smith, Bremen

EPSOM SALT—500 bgs, Chase Manhattan Bank, Hamburg

ETHYLENE GLYCOL—3cs, Havre

FENNEL SEED—200 bgs, Rijeka

FISHLIVER OIL—10 dms, Kanematsu N Y Inc, Yokohama

FISHMEAL—2,000 bgs, Eastern Banana Co, Taboga

FUEL OIL—103,188 bbls, Metropolitan Petroleum Corp, Curacao
58,032 bbls, Esso Standard Oil Co, Caripito
25,000 bbls, Hartol Oil Co, Caripito
124,299 bbls, Hess Inc, Maracaibo
79,467 bbls, Hess Inc, Punta Cardon
354,974 bbls, Esso Standard Oil Co, Las Piedras
348,534 bbls, Esso Standard Oil Co, Aruba
25,000 bbls, Maratime Petroleum Corp, Caripito
10,000 bbls, Asiatic Petroleum Corp, Caripito
187,292 bbls, Esso Export Corp, Aruba

GAMMA ACID—43 dms, Atlantic Chemical Corp, Genoa

GARLIC OIL—2 cs, Fritzsche Bros, Valparaiso

GELATIN—300 bgs, Transatlantic Animal By Products Corp, Rotterdam
50 bgs, T M Duche & Sons, Rotterdam
100 bgs, Hensel Bruckmann & Lorbacher, Rotterdam
300 bgs, T M Duche & Sons, Havre
300 bgs, T M Duche & Sons, Antwerp
3 bbls, Coignet Chemical Co, Antwerp
100 bgs, Transatlantic Animal By Products Corp, Liverpool
300 bgs, King Shipping Co, Hamburg

GHATTI GUM—57 bgs, Morningstar Nicol, Bombay

GINGER—125 bgs, Dodge & Olcott, Kingston

GLUE—180 cs, M Corbett, Bordeaux

GLUTAMIC ACID HYDROCHLORIDE—5 dms, R J Saunders, Hamburg

GRAPHITE—750 bgs, Asbury Graphite Mills, Colombo
250 bgs, C Pettinos, Colombo
600 bgs, Asbury Graphite Mills, Hamburg
300 bgs, Joseph Dixon Crucible Co, Bremen

GYPSUM, CRUDE—10,019 tons, U S Gypsum Co, Little Narrows

IPECAC ROOT—5 bgs, Wessel Duval & Co, Cristobal

IRON BLUE—13 dms, Van Oppen & Co, Liverpool

IRON OXIDE—224 bgs, T H Deutz, Liverpool

ISOSAFROEUGENOL—7 cs, Export Import Services, Yokohama

JUNIPER BERRIES—167 bgs, Karl H Landes & E Balint, Leghorn
84 bgs, Meer Corp, Leghorn

KARAYA GUM—134 bgs, Stein Hall & Co, Bombay
61 bgs, Max Van Pels, Bombay
429 bgs, Colony Import & Export Corp, Bombay
481 bgs, Morningstar Nicol, Bombay

LACTOSE—100 dms, Chas L Huisking & Co, Liverpool

LEMONGRASS OIL—41 dms, Lenhardt & Brush, Puerto Barrios

LIME OIL—3 dms, Fritzsche Bros, Port Au Prince
1 dm, Citrus & Allied Essential Oils Co, Puerto Plata

LITHARGE—184 dms, Eagle Picher Co, Tampico

LOCUST BEAN GUM—60 cs, Wedeman Godknecht, Genoa

LOGWOOD EXTRACT—40 cks, American Dyewood Co, Kingston

MACE—96 cs, Borneo Sumatra Trading Co, Singapore

MAGNESITE—800 bgs, Smith Chemical & Color Co, Rotterdam

MAGNESIUM CARBONATE—60 cs, Chas L Huisking & Co, Genoa

MENTHOL—50 cs, International Commodities Corp, Santos
25 cs, I R Boody & Co, Kobe

MERCURY—19 btls, Callao

MINERAL VIOLET—15 dms, Landers Segal Color Co, Rotterdam

MONTAN WAX—66 bgs, Cornelius Wax Refining, Rotterdam

NAPHTHALENE—1,429 bgs, Fallek Products Co, Antwerp

NAPHTHENIC ACID—2,481 bbls, Esso Standard Oil Co, Aruba

NAPHTHOL—12 dms, Hensel Bruckmann & Lorbacher, Hamburg

NUTMEG—112 bgs, George Lueders & Co, Colombo
100 bgs, Virchand Panachand, Colombo
56 bgs, Karl H Landes & E Balint, Singapore
125 bgs, George Lueders & Co, Rotterdam
125 bgs, Rotterdam

OCHRE—224 bgs, C J Osborn Co, Capetown
448 bgs, Whittaker Clark & Daniels, Capetown

OCOTEA CYMBARUM OIL—44 dms, Dodge & Olcott, Itajai

ORANGE OIL—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata

PAPAIN—102 cs, Chas L Huisking & Co, Colombo

PAPRIKA—185 bgs, A A Sayia, Alicante

PEPPER, BLACK—140 bgs, Imperial Commodities Corp, Singapore
160 bgs, East India Trading Co, Colombo
70 bgs, Singapore

PEPPER, RED—40 bgs, Louis Furth, Kingston
50 bgs, J H Elton, Kingston
80 bgs, Kellys America Ltd, Kingston

PEPPERMINT OIL—10 cs, J Haywood & Sons, Kobe

PETROLEUM, CRUDE—206,986 bbls, Metropolitan Petroleum Corp, Bachaquero
141,821 bbls, Socony Mobil Oil Co, Puerto La Cruz
16,939 tons, California Oil Co, Sidon
152,776 bbls, Hess Inc, Punta Cardon

PHENOLIC RESIN—5 dms, Standard Oil Co, Manila

POLLACKLIVER OIL—150 dms, Wilbur Ellis Co, Yokohama
50 dms, National City Bank, Yokohama

POLYVINYL ACETATE RESIN—740 bgs, G G Lippelgoes, Kobe

POPPY SEED—150 bgs, Hoger Corp, Rotterdam
100 bgs, Rotterdam

POTASSIUM CYANIDE—200 dms, Chemical Manufacturing Co, Liverpool

POTASSIUM PERCHLORATE—210 dms, C Hardy, Havre

POTASSIUM SILICATE—907 bgs, Sylvania Electric Co, Rotterdam

POTATO STARCH—25 bgs, Rotterdam

PSYLLIUM SEED HUSK—295 bgs, Meer Corp, Bombay
333 bgs, T M Duche & Sons, Bombay
376 bgs, Biddle Sawyer Corp, Bombay

PYRIDINE—38 dms, Marine Midland Trust Co, Havre

QUEBRACHO EXTRACT—4,100 bgs, American Tanners Ltd, Buenos Aires
536 bgs, First National Chicago, Buenos Aires
1,097 bgs, Tanimex Corp, Buenos Aires

QUININE HYDROCHLORIDE—4 dms, Frank Samuel & Co, Southampton

RAPESEED OIL—410 tons, Balfour Guthrie, Karlshamn

SAGE LEAVES—153 bls, K H Werthon, Hamburg
400 bls, Rijeka

SAGO FLOUR—111 bgs, Manhattan Adhesives Corp, Singapore
165 bgs, R Lennard & Co, Singapore

SANDALWOOD CHIPS—20 bgs, S B Penick & Co, Bombay

SEEDLAC—1,000 bgs, Bangkok

SESAME OIL—50 dms, Magnus Mabee & Reynard, Hamburg

SILICONE CARBIDE—100 bgs, Mundus Chemical Corp, Hamburg

SODIUM ALUMINATE—50 dms, Chemical Manufacturing Co, Liverpool

SODIUM CYANIDE—750 dms, Chemical Manufacturing Co, Liverpool
160 dms, C Hardy, Havre

SODIUM HYDROXYCINNAMATE—33 cks, Havre

SODIUM PERBORATE—110 bgs, Rotterdam

SODIUM SULFATE—3,000 bgs, Antwerp

SPEARMINT OIL—21 dms, Fritzsche Bros, Buenos Aires

SPERM OIL—142 tons, Archer Daniels Midland Co, Pisco

SULFANILAMIDE—40 dms, Henley & Co, Liverpool
40 dms, Chemo Puro Manufacturing Corp, Liverpool

TALC—1,350 bgs, Charles Mathieu, Genoa

TANKAGE—240 bgs, Tupman Thurlow, Montevideo

TANNING EXTRACT—700 bgs, Tanimex Corp, Marseille
1,000 bgs, Bordeaux

TAPIOCA FLOUR—508 bgs, Wah Chang Corp, Penang
1,667 bgs, Manhattan Adhesives Corp, Itajai
2,280 bgs, Stein Hall & Co, Bangkok
2,200 bgs, American Key Products, Bangkok
3,344 bgs, Bangkok

TARA SEED—495 bgs, Callao

TARTARIC ACID—310 bgs, Nylos Trading Co, Genoa

THIAMINE HYDROCHLORIDE—20 dms, Takamine Overseas Inc, Yokohama

THIAMINE MONONITRATE—4 dms, Takamine Overseas Inc, Yokohama

TRAGACANTH GUM—83 bgs, Gill & Duffus, London

TRICHLOROETHYLENE—100 dms, Uddeholm Co of America, Gothenburg

VANILLA BEANS—37 cs, F Huber & Co, Tampico

VERBENA LEAVES—42 bgs, Meer Corp, Marseille

VETIVER OIL—1 dm, W J Bush & Co, Port Au Prince

VITAMIN B12—5 cs, Kanematsu N Y Inc, Kobe

VITAMIN C—30 dms, Byco Ltd, Yokohama
26 dms, Mitsubishi International Corp, Yokohama

WHITING—2,000 bgs, Antwerp

WOOL GREASE—4 dms, James E Fox, Genoa
100 dms, N I Malmstrom, Liverpool

YLANG YLANG OIL—4 dms, Chase Manhattan Bank, Havre

ZINC PHOSPHIDE—20 dms, Hudson Shipping Co, Genoa

Los Angeles

ASBESTOS FIBER—5,600 bgs, Johns Manville Corp, Lourenco Marques
3,177 bls, Johns Mansville Corp, Fremantle
640 bgs, Lourenco Marques

BONEMEAL—55 dms, Pacific Coast Terminal Co, Antwerp
2,205 bgs, H V Nootbaar & Co, Alexandria

CARAWAY SEED—200 bgs, B C Ireland, Rotterdam

CARDAMOM SEED—25 cs, San Jose

CARNAUBA WAX—16 bgs, Colonial Trust Co, Hong Kong

CASEIN—600 bgs, Borden Co, Buenos Aires
150 bgs, Buenos Aires

CASSIA—88 bls, Internatio Rotterdam, Djakarta
261 bls, Borneo Sumatra Trading Co, Djakarta
33 bls, H M Newhall & Co, Djakarta

CODLIVER OIL—20 dms, W J Brynes & Co, Bergen

COPRA—2,000 tons, American Trust Co, Legaspi
1,500 tons, American Trust Co, Tabaco
500 tons, Pacific Vegetable Oil Corp, Tabaco
500 tons, Pacific Vegetable Oil Corp, Cebu
1,000 tons, American Trust Co, Cebu
2,000 tons, American Trust Co, Siain
2,295 tons, Procter & Gamble Co, Jagna
1,000 tons, American Trust Co, Tacloban

COPRA CAKE—2,240 bgs, Pacific Vegetable Oil Corp, Manila
11,200 bgs, American Trust Co, Zamboanga
11,200 bgs, Cargill Inc, Zamboanga
7,840 bgs, Procter & Gamble Co, Manila

CORN STARCH—601 bgs, Bremen

CREOSOTE OIL—591,290 tons, Bernuth Lembeke Co, Kobe
595,048 tons, Pernuth Lembeke Co, Yokohama

CUMIN SEED—54 bgs, W L Wilner, Hong Kong

CUTTLEFISH BONE—50 cs, J Murez, Hong Kong

EARTH COLORS—450 bgs, Amcrican Chemical Co, Bremen
900 bgs, Naftone Inc, Rotterdam

GYPSUM, CRUDE—16,015 tons, Kaiser Gypsum Co, San Marcos

MINERAL COLORS—88 bgs, Frank D Davis Co, Amsterdam

NAPHTHALENE—133 bgs, Westco Chemicals Inc, Hamburg

PEATMOSS—448 bls, Atkins Kroll & Co, Hamburg
1,000 bls, H V Nootbaar & Co, Bremen
500 bls, Wilbur Ellis Co, Bremen

PEPPER, BLACK—160 bgs, Borneo Sumatra Trading Co, Djakarta
95 bgs, Singapore

PEPPER, RED—50 bgs, Hismoco American Co, Yokohama

PEPPER, WHITE—42 bgs, Borneo Sumatra Trading Co, Belawan Deli

PETROLEUM, CRUDE—41,821 tons, Standard Oil Co, Sungai Pakning
558,300 bbls, Standard Oil Co, Pakning
211,357 bbls, The Texas Co, Sungai Pakning
20,527 tons, The Texas Co, Trinidad
209,697 bbls, Fletcher Oil Co, Sungai Pakning

POPPY SEED—50 bgs, McClintock Stern Co, Rotterdam

QUEBRACHO EXTRACT—1,062 bgs, Tan American Corp, Buenos Aires
639 bgs, First National Chicago, Buenos Aires

SESAME SEED—125 bgs, Hismoco American Co, Corinto

TUNG OIL—99 tons, Pacific Vegetable Oil Corp, Buenos Aires

Philadelphia

ANTIMONY OXIDE—1,000 bgs, Harshaw Chemical Co, New Castle
500 bgs, National Lead Co, New Castle

ANTIMONY REGULUS—428 cs, Split

ASBESTOS FIBER—500 bgs, Phila National Bank, Lourenco Marques
900 bgs, Davies Turner & Co, Durban

CALCIUM NITRATE—2,500 bgs, McKesson & Robbins, Drammen

CALCIUM PHOSPHATE, DIBASIC—420 bgs, Wessel Duval & Co, Antwerp

CHESTNUT EXTRACT—1,100 bgs, Barkey Importing Co, Genoa

CHINA CLAY—5,153 tons, Fowey

FLUORSPAR—899 tons, Chemical Bank, Huelva

GYPSUM, CRUDE—11,748 tons, National Gypsum Co, Halifax
5,977 tons, U S Gypsum Co, Little Narrows

LICORICE ROOT—3,079 bls, Mac Andrews & Forbes, Iskenderun
935 bgs, Izmir

MAGNESITE—4,000 bgs, Split

NAPHTHALENE—2,856 bgs, Barrett Division, Hull
1,111 bgs, Rotterdam

NIGER SEED—176 bgs, R T French Co, Massawa

PEATMOSS—500 bls, E Dunwoody, Bremen
800 bls, Bremen

PETROLEUM, CRUDE—231,012 bbls, Gulf Oil Corp, Bahias
377,170 bbls, Gulf Oil Corp, Puerto La Cruz
400,168 bbls, Gulf Oil Corp, Mina Al Ahmadi
260,852 bbls, Atlantic Refining Co, Pamatacual
232,952 bbls, Atlantic Refining Co, Bandar Mashur
121,990 bbls, The Texas Co, Amuay Bay
114,347 bbls, Atlantic Refining Co, La Salina
125,728 bbls, Atlantic Refining Co, Mina Al Ahmadi
132,257 bbls, Atlantic Refining Co, Puerto La Cruz

TANNING EXTRACT—800 bgs, Tanimex Corp, Bordeaux

TAPIOCA FLOUR—875 bgs, Geismar & Co, Bangkok

UREA—760 bgs, Nylos Trading Co, Genoa

VANILLA BEANS—29 cs, Zink & Trieste, Antalaha
23 cs, Antalaha

WATTLE EXTRACT—1,068 bgs, Barkey Importing Co, Durban

San Francisco

BONEMEAL—1,100 bgs, Atkins Kroll & Co, Alexandria

CALCIUM CHLORIDE—300 bgs, Antwerp

CARAWAY SEED—100 bgs, B C Ireland, Rotterdam

CELERY SEED—88 bgs, H M Newhall & Co, Bombay

COCONUT OIL—350 tons, Chase Manhattan Bank, Manila
149 tons, Procter & Gamble Co, Manila
320 tons, American Trust Co, Zamboanga

COPRA—269 tons, Procter & Gamble Co, Cebu
316 tons, Procter & Gamble Co, Nasipit
887 tons, Procter & Gamble Co, Dumaguete
500 tons, Cebu

CORIANDER SEED—100 bgs, Wm E Martin & Sons, Hamburg

CUTTLEFISH BONE—50 cs, Genoa

DEXTRIN—100 bgs, Arabol Manufacturing Co, Rotterdam

FERROUS SULFATE—567 bgs, D M Hicks, Kobe

GELATIN—37 bbls, Coignet Chemical Co, Antwerp

MACE—40 cs, Singapore

NUTMEG—70 bgs, Singapore

PEPPER, BLACK—80 bgs, Borneo Sumatra Trading Co, Tandjong Priok
318 bgs, Mincing Trading Corp, Tandjong Priok
70 bgs, Internatio Rotterdam, Singapore
580 bgs, Singapore

PERCHLOROETHYLENE—110 dms, D M Hicks, Antwerp

PETROLEUM, CRUDE—262,359 bbls, Standard Oil Co, Ras Tanura
37,950 tons, Tidewater Oil Co, Mina Al Ahmadi
202,137 bbls, Standard Oil Co, Puerto La Cruz

POLLACKLIVER OIL—100 dms, Chase Manhattan Bank, Yokohama

SAFFRON—3 cs, Monteverde & Parodi, Genoa

SODIUM PERBORATE—220 bgs, I M Sobin Co, Rotterdam

TAPIOCA FLOUR—1,680 bgs, Internatio Rotterdam, Singapore
4,184 bgs, Internatio Rotterdam, Bangkok
1,000 bgs, Morningstar Nicol, Bangkok

UREA—2,000 bgs, Atkins Kroll & Co, Antwerp

WHITING—1,600 bgs, Antwerp

Chemical Exports

—*Continued from page 4*

in both exports and imports were scattered over the chemical schedule.

The record of chemical exports and imports followed the trend of all merchandise generally. Foreign trade as a whole was off in September from that of August, but for the first nine months of the year it was well ahead of that of a year ago.

Exports of general merchandise during September were valued at $1,531,000,000, about 8 percent less than the $1,678,000,000 reported during August, but about equal to the September, 1956, total of $1,533,800,000. For the first nine months of this year, exports were valued at $15,816,300,000, or 14 percent more than the $13,864,100,000 million reported for the same period last year.

September imports of general merchandise amounted to $1,007,100,000, 3 percent less than the August total of $1,032,400,000, but about 1 percent over the September, 1956, total of $955.2 million. The first nine months comparisons are $9,638,900,000 this year or 2 percent more than the $9,448,600,000 last year.

Selections for Your Bookshelf

CRITICAL DATA TABLES. Compiled by George E. Corson for the Corn Industries Research Foundation. Paper-board, screw-clip bound; 452 pages, 8½ x 11 inches, marginal tab guides. Washington: Corn Industries Research Foundation, Inc. $4.

The multitude of data tabulated in this compilation have to do with corn products and materials of relative utilization derived from other sources. Their informative value is calculable on the bases of broad and varied areas in consuming and processing fields. The CIRF description—"the most complete compilation to date of tables, charts, graphs, and similar information pertaining to processes and products of the corn refining industry"—is not overdrawn.

This compilation is an extended revision of an earlier one, distribution of which was confined within the industry. It has been prepared and published in responsive recognition of the interest and attention gained by earlier issue in all areas of informative reference. It is for that reason that this new edition is being made generally available—"at cost," says CIRF.

Throughout the range of products covered, the statistical data give detailed treatment to analysis, boiling points, freezing points, moisture equilibrium, refractive indexes, viscosities, specific heats, densities, optical rotations, flash and fire points, and solubilities, along with widely applicable data on essential humidity, factors, correction and conversion drawn from numerous industrial and governmental sources and trade and technical publications. There is a twenty-two-page index to all their details.

Copies of the book are available at $4 each, postpaid, from the Corn Industries Research Foundation, Inc., 1001 Connecticut avenue, N.W., Washington 6, D.C.

FOREST FERTILIZATION—Compiled by Donald P. White and Albert L. Leaf. Paper; 305 pages, 6x9 inches. New York: State University College of Forestry. $3. Should be obtained from Dr. E. D. Crittenden, Director of Research, Nitrogen Division, Allied Chemical & Dye Corporation, 40 Rector street, New York 6, N.Y.

This is an annotated bibliography, which took two years to compile, and was published by the College of Forestry at Syracuse University to aid the many new investigations on forest soil research. Here in one book are the references to the world's literature on forest fertilization experiments.

The book contains some 700 references, with abstracts, on the use of fertilizers on trees throughout the world. The studies range from efforts to increase wood output in forest-poor countries, to the study of the effect of various fertilizers on the color of ornamental trees.

CATALYSIS IN PRACTICE. Edited by Charles H. Collier. Cloth; 153 pages, 5 x 7¼ inches. New York: Reinhold Publishing Corp. $3.95.

This volume covers the papers presented at the fifth meeting, sponsored jointly by the Phildalephia-Wilmington Section of the American Institute of Chemical Engineers and the School of Chemical Engineering of the University of Pennsylvania.

The scope of the broad subject of catalysis was necessarily limited, because of time, to existing technology within the chemical and petroleum industries. Such limitations excluded the possibility of discussing such catalytic developments as the use of enzymes, photolysis, and applications of ionizing radiation to promote chemical reactions.

Topics covered by the symposium included what catalyst to use for any given process, and why; the commercial preparation of industrial catalysts; fixed bed catalyst systems; the economics of catalyst use; operationg problems in catalytic processing; and trade and prospects in catalysis.

SIX DECADES OF THE CHEMISTS CLUB. By D. H. Killeffer. Paper; 66 pages 6½ by 10 inches. New York: The Chemists' Club.

While normally the historian of a club need only write or revise the club's history every fifty years, the growth of the Chemists Club in New York has been such that it was felt necessary to publish a broader more up to date history than that which was published in 1948 covering its first fifty years.

This volume covers the origin of the club, its property acquisition, its activities, and membership growth. It should be of interest to all who are involved with the chemical industry, not merely club members, because of the role which this institution plays in the social and business contacts among chemical industry members and their guests.

CRITICAL DATA TABLES—Compiled by George E. Corson of The Corn Industries Research Foundation. Paper, 452 pages, 8½ x x11 inches. Washington, D. C.: Corn Industries Research Foundation. $4.00.

This is a compilation of data designed specifically as a handy reference for the corn industries. Tabulated data of the physical properties of corn syrups and corn sugars are given, together with other tabular data on dextrose and sucrose, starch and dextrins, vegetable oils, feed and grain, factors and conversion tables, humidity and water.

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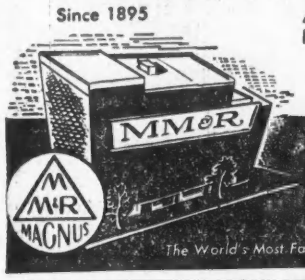

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Essential Oils, Aromatics

Geranium oil, in limited supply and strong demand, again climbed in price last week. Algerian oil rose 50 cents per pound, while Bourbon material was priced $1 per pound higher. Bullish behavior of this market was reflected in the trade in rhodinol. Though unchanged in price last week, the derived material was firm at the higher prices put into effect a few weeks ago. And dealers in rhodinol were counting on the tight supply of oil and cumulative increases in oil prices to entrench them in their currently strong market position.

Several other essential oils were quoted higher last week. Natural sassafras oil was up 25 cents per pound, and spearmint oil was quoted 15 cents per pound higher. Up 10 cents per pound were almond and West Indian lime oils. Rosemary oil climbed 5 cents per pound.

Lemongrass rose 30 cents per pound. Indian celery seed advanced 2½ cents per pound, while the French material went 1 cent per pound higher. Moroccan coriander seed was advanced ½ cent per pound. Both the Nigerian split and Jamaica No. 3 ginger were priced 1 cent per pound higher.

Nutmeg oil and domestic dillweed oil each registered 75 cents per pound declines. Peruvian bois de rose oil was off 15 cents per pound.

Each off 1 cent per pound were cochin ginger for December-January shipment, cumin seed, pimento and Ceylon No. 2 cinnamon.

Demand for orange oil was steady at the firmer position reached some weeks ago, trade sources reported. Supplies were generally tight, with California oil notably scarce. Quotations remained unchanged. There were still no supplies of Brazilian USP oil available.

Lemon oil from all principal supply sources tended to glut the market for that material. Dealers were still unable to detect any signs of recovery from the downtrend that had characterized the lemon oil trade during the past several weeks. Prices, however, were steady at previous quotations.

Feeble demand characterized the market for anethol last week.

Labile developments in the aromatics market and poor demand softened the tone for hydroxycitronellal. Trade sources did not anticipate any improvement here in the immediate future.

Price Trends

Advanced

Almond oil, sweet, 10c. per lb.
Celery seed, French, 1c. per lb.
Indian, 2½c. per lb.
Coriander seed, Moroccan, ½c. per lb.
Ginger, Jamaica No. 3, 1c. per lb.
Nigerian split, 1c. per lb.
Geranium oil, Algerian, 50c. per lb.
Bourbon, $1 per lb.
Lemongrass, 30c. per lb.
Lime oil, West Indian, 10c. per lb.
Rosemary oil, 5c. per lb.
Sassafras oil, natural, 25c. per lb.
Spearmint oil, 15c. per lb.

Reduced

Bois de Rose oil, Peruvian, 15c. per lb.
Cinnamon, Ceylon No. 2, 1c. per lb.
Cumin seed, 1c. per lb.
Dillweed oil, domestic, 75c. per lb.
Ginger, Cochin: Dec./Jan., 1c. per lb.
Nutmeg oil, 75c. per lb.
Pimento, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
145.91	145.77†	146.36†	145.34

For Current Prices see page 9

† Revised.

Essential Oils

Almond Oil—Sweet almond oil of USP grade was quoted 10 cents per pound higher last week. Prices ranged from $1.25 to $1.40 per pound. There was no change in the price pattern on the bitter almond oil grades.

Bois de Rose—The Peruvian type of rosewood oil declined 15 cents per pound last week, but the Brazilian material remained firm and unchanged. Brazilian was quoted at $3.50 to $3.85 per pound, while the Peruvian type which had formerly been quoted as low as $2.90 per pound, dropped to prices as low as $2.75 per pound in drums. Depending upon quantity and seller, Peruvian prices ranged upward from this to $3.50.

Coriander—Inside prices were steady at $9 per pound for USP material in bottles, but the upper end of the range drifted up to $12.50 per pound, compared to a high of $10.50 per pound listed in the week previous.

Dillweed—Prices in this market were not too clear cut last week. Quite a few dealers indicated that prices were in the range of $3.75 to $4 per pound, a situation which did not fit well with a so-called price decline of 50 cents per pound two weeks before made in certain quarters, and described as a price weakening action under new crop influence.

Geranium—Algerian oil rose 50c. per pound last week, while Bourbon quotations were $1 per pound higher. Both were now quoted at $16.25 to $17 per pound.

Lemon—Supplies from all principal sources tended to glut this market, which has not yet recovered from the downtrend noted over the past several weeks. Prices were steady at previous quotations, however. USP grade from California was bringing from $3 to $4 per pound, and Messina oil was quoted in the range $4.50 to $6 per pound. Terpeneless material in bottles was moving at from $22 to $30 per pound.

Lemongrass—Minimum quotations advanced by 30c. per pound last week. The range now ran from $1.15 to $1.35 per pound.

Lime—Prices on distilled oil were higher last week. Mexican material advanced 60c. per pound, while the West Indian product was quoted 10c. per pound higher. Prices on oil from both sources ranged from $6.10 to $7.50 per pound.

Nutmeg—Prices for USP material declined 75c. per pound last week. Latest available quotations listed East Indian material in a range from $12.75 to $15 per pound and West Indian nutmeg ranging from $12.75 to $17 per pound.

Orange—Demand was steady at the firmer position reached some weeks ago, trade sources reported. Supplies in general were somewhat tight, with California oil notably scarce. Quotations were unchanged. California oil was pegged at 70c. per pound for distilled and ranged up to $1.75 for cold pressed. Florida oil was quoted at 55c. per pound. Messina was quoted in the range $3.15 to $5.85, while the price of West Indian oil ranged from $2.50 to $3.65. Sweet distilled material was moved at from 35c. to 80c. per pound. There were still no supplies of Brazilian USP oil available.

Rosemary—Minimum price for NF oil from Spain was 5c. per pound higher last week, the range now running from 90c. to $1.35 per pound. Technical material was unchanged at 50c. to 90c. per pound.

Sassafras — Domestic producers last week hiked quotations on NF grade oil from natural sources by 25c. per pound. The range at latest reports was $1.90 to $2.10 per pound. Artificial oil prices, in the range 50c. to 62c. per pound, were unchanged.

Spearmint—Minimum quotations on NF material climbed 15c. per pound last week to $3.90 per pound. The upper end of the range was unchanged at $4.50 per pound.

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Black Pepper, 8 lots, 3,004 bags.
Cassia, 13 lots, 2,751 bales.
Celery Seed, 100 bags.
Chilles, 210 bags.
Coriander Seed, 400 bags.
Cumin Seed, 2 lots, 270 bags.
Dill Seed, 400 bags.
Fennel Seed, 93 bags.
Fennugreek Seed, 4 lots, 315 bags.
Ginger, 172 bags.
Gum Karaya, 4 lots, 235 bags.
Kola nuts, 2 lots, 346 bags.
Mace, 5 lots, 167 bags.
Nutmegs, 7 lots, 421 bags.
Papain, 90 cases.
Sage Leaves, 100 bales.

Aromatic Chemicals

Anethol—Rather feeble demand characterized this market last week, sustaining the poor tone that has prevailed for months. USP grade was quoted at $1.35

Essential Oils

per pound, with few takers at that price. There was little interest in technical material, which continued unchanged at $1 to $1.25 per pound.

Hydroxycitronellal—Poor demand and labile developments in the essential oils markets softened the tone here. The inside price of $4.95 per pound, established several weeks ago as the result of a decline of 50c. per pound, was still in effect. Trade sources did not anticipate improvement in the immediate future.

Rhodinol—Bullish behavior of the current market in geranium oil was reflected in a firm market for rhodinol. The derived material was bringing spot prices ranging from $37 to $39 per pound. Dealers were counting on tight supplies of oil and last week's increase in oil prices to entrench them in this strong market position.

Seeds and Spices

Cassia—The market position on all grades was regarded as firm on the spot market here, and the firm position here was a reflection of the steady and firm position abroad. No changes in prices of any significance was looked for in the immediate future.

Celeryseed—This item advanced in price last week, French moving up 1 cent per pound, and prices on Indian being quoted 2½ cents per pound higher, on spot.

Corianderseed, Reclaimed — Moroccan prices were firm and quoted ½ cent per pound higher last week, at 9½ cents. Rumanian was unchanged at 7½ cents per pound.

Cuminseed—This market was a bit weaker last week. Spot Iranian seed was priced at 24 cents per pound, off 1 cent from former levels.

Ginger—Trading was mostly on job lots, but the price position was regarded as strong. Jamaican ginger was the item of greatest buying interest. Prices advanced 1c. per pound on Jamaican and on Nigerian split. Other grades were unchanged.

Pepper, Black—Spot prices were quoted 2c. per pound lower last week on Malabars, in line with the movement in pepper generally. The buying interest seemed to be confined to job lots for immediate needs only. Some buyers indicated a willingness to make larger purchases at prices fractionally under current quotations, but sellers were not willing to make such concessions, in view of primary market conditions.

Lampongs appeared as the cheapest source of supply, and the feeling was expressed that any change of price ideas in Indonesia would quickly be reflected here. The import of black pepper in 1956 amounted to 16,331 tons, as compared with an estimated 1957 import of some 13,800 tons.

Pepper, White—Muntok was off 2c. per pound last week. Spot prices stood at 33½c. per pound. Material awaiting release was priced at 32c., material afloat was priced at 32c., and January shipment material at 30c.

Pimento—Prices of Mexican were off 1c. per pound last week, being quoted at 33c. per pound. Buying interest was described as sluggish.

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Coatings Materials

A break in the price of lead metal was followed promptly last week by declines of ½ cent per pound in the pigments. Oxide was lowered to 15¼ cents per pound for 95 percent lead, 15.45 cents for 97 percent and 15.60 cents for 98 percent, carlots. Litharge became 14¾ cents per pound and orange mineral fell to 17.60 cents, carlots. This downtrend in lead and its derivatives has been a feature of the pigment market since early in the year. It has generally been attributed to the pressure exerted on the market by freely available foreign material. The industry feels that a protective tariff is called for in this case, but as yet the support generated in congress has been inadequate.

Late last Friday a major producer announced a 2½ cent per pound reduction in antimony oxide. This brought carlots to 24½ cents per pound and less than carlot shipments to 26 cents per pound. As there was no corresponding change in basic metal observers attributed the move to market conditions.

A price list that was issued last week provides a comprehensive view of the first quarter price picture for dry colors. It will be noted from the box appearing in this column that the advances are neither as numerous nor as steep as they were for this time last year. Two big volume materials—iron blue and chrome colors—will continue steady and unchanged at current levels.

Shortly following the recent decline in cadmium-selenide lithopones a major manufacturer announced proportional cuts in quotations of cadmium-mercury lithopones. This was presumably a competitive measure, as the $3 decline in selenium metal offers no advantages to makers of cadmium-derived lithopones. Under the new schedule, light red is quoted at $1.73 per pound, medium light at $1.82, medium at $1.90, dark at $2 and maroon at $2.09.

Price Trends

Advanced

Dimethyl phthalate, 1½c. per lb.
Diethyl phthalate, 1½c. per lb.

Reduced

Antimony oxide, 2½c. per lb.
Lead oxide, ½c. per lb.
Litharge, ½c. per lb.
Mineral orange, ½c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
101.29	100.29*	100.31	100.30

* Revised.

For Current Prices see page 9

January 1 Price Advances

Alkali blue powder, 6c. per lb.
Alkali blue toner, 8c. per lb.
Benzidine yellow, lightfast, 15c. per lb.
AAOT, 10c. per lb.
AAA, 10c. per lb.
Brilliant green thioflavin toner, 10c. per lb.
Dinitroaniline toner, orange, 6c. per lb.
Eosin toner, red, 10c. per lb.
Hansa yellow, 10G, 10c. per lb.
Lithol red toner, barium, 5c. per lb.
Lithol rubine toner, resinated, 7c. per lb.
Para toner, red, 6c. per lb.
Chlorinated, 6c. per lb.
Peacock blue lake, fugitive, 10c. per lb.
Pigment green B, 10c. per lb.
Red Lake toner, 5c. per lb.
Rhodamine red, molybdated, 20c. per lb.

A plasticizer maker last week announced advances of 1½ cents per pound in diethyl and dimethyl phthalate, effective immediately on spot and January 1 on contract. As of Friday the news was still getting around to the rest of the trade. There was no indication as to whether other makers intended to match the move.

The tone in last week's casein market was reported softening, with Argentine material quoted at 21½ cents per pound, spot, and slightly lower for future shipment. Slow demand and mounting production were said to account for the easy tone. Amply available material from Australia was also exerting pressure on prices, according to a report from local sources.

Prime Pigments

Alkali Blue—Powder is slated to move up 6c. per pound to $2.41. An 8c. increase in the toner will push the price range up to $1.28-$1.36 per pound: minimum deliveries of 125 pounds, $1.36; 625 pounds, $1.31, and 3,125 pounds, $1.28.

Antimony Oxide—A price reduction of 2½c. per pound, effective immediately, was announced last Friday by a major producer. The new schedule made carlots 24½c. per pound and less than carlot shipments 26c. per pound.

Blue Toners—One shade of blue peacock and two of victoria toner will be hiked in price January 1. All other shades quoted in OPD will continue at current levels. PMA victoria blue toner, molybdated, will increase 25c. per pound to $4.75, while PTA will increase a similar amount to $5.55. Peacock blue lake will move up 10c. per pound to $1.

Late last week a major producer announced a spot reduction for its non-flocculating grade of phthalocyanine blue toner. Previously quoted at $4.20 per pound, the material was moved down to $3.80 for GT shade and $3.65 for B shade.

Cadmium Colors — Substantially lower quotations of cadmium-selenide lithopones were posted recently as a result of a $3 cut in the price of selenium. The reductions ranged 11c. to 40c. per pound, depending upon selenium content. Following is the new price schedule, the range reflecting differences between manufacturers as to shipping terms: dark red shade, $2.61-$2.66 per pound; light red shade, $1.89-$1.94 per pound; maroon shade, $2.82-$2.84; dark maroon, $2.87-$2.88; medium red shade, $2.26-$2.31; medium-light shade, $2.02-$2.07; orange-red shade, $1.71, and orange shade, $1.57.

Cadmium-mercury lithopones, which are competitively linked to the selenides, have declined by proportionate amounts. Under the new schedule, light is quoted at $1.73 per pound, medium light at $1.82, medium at $1.90, dark at $2 and maroon at $2.09.

Carbon Black—The following figures in thousands of pounds, indicate production, shipments, stocks and exports of carbon black for October, 1957, with figures for September, 1957, and October, 1956, reported for comparison.

	Furnace	Contact	Total
Production			
October, 1957	121,463	29,278	150,741
September, 1957	117,178	28,389	145,567
October, 1956	129,548	30,972	160,520
Shipments			
October, 1957	133,018	31,130	164,148
September, 1957	116,609	27,443	144,052
October, 1956	139,569	36,807	176,376
Stocks			
October, 1957	248,944	74,494	323,438
September, 1957	260,499	76,346	336,845
October, 1956	228,692	79,197	307,889
Exports			
October, 1957	*	*	*
September, 1957	21,058	14,240	35,298
October, 1956	25,295	18,930	44,225

* Not available.

Chrome Colors — Output of chrome colors totaled 4,080 short tons in the month of September—a slight decline from the 4,261 tons produced a month earlier, but an improvement over the September, 1956, total of 3,902 tons. Individual production figures for September were reported as follows, with August totals shown in parentheses:—Chrome green (chrome yellow and iron blue), 427 tons (441); chrome oxide green, 531 (415); chrome yellow and orange, 2,002 (2,255); molybdated chrome orange, 514 (unchanged from August); and zinc yellow (zinc chromate), 606 (636).

Stocks of all chrome colors on September 30 aggregated 4,930 tons, as compared with 4,875 tons on August 31.

One major producer has announced that its price schedule for chrome colors will be unchanged with the start of the new year. Other makers are also expected to hold the line. Chrome green lists at 42c. per pound for light shades, 43c. for medium and 44c. for deep and dark.

Greens—Brilliant thioflavin green toner, molybdated, has been slated to move up 10c. to $5.20 per pound. Pigment Green B will move up by the same amount to $1.45. Phthalocyanine, melachite and all other greens are reported steady and unchanged.

Lead Pigments — Quotations were reduced promptly last week with the news that lead metal had declined ½c. in the American market. Carload listings of red lead became 15¼c. per pound for 95 percent, 15.45c. for 97 percent and 15.60c. for 98 percent, all down ½c. per pound. The new tabs for litharge and orange mineral are respectively, 14¾c.

Coatings Materials

and 17.60c., carloads. For smaller shipments, prices continue 1c. per pound higher.

The price decline in metal—the latest of several posted this year—was regarded as a competitive adjustment stimulated by freely available material from foreign sources.

Maroons—No changes at all are in store for this group. Toluidine maroon will continue at $3.80 per pound and naphthol at $4.20—price levels that were put into effect a year ago.

Oranges — Chemically pure dinitroaniline toner is moving up 6c. per pound at the start of the first quarter to reflect a proportional increase in the price of 2,4-dinitroaniline. The toner will list at $1.56 per pound, as against a current quotations of $1.50.

Reds — There are no price changes slated for the great majority of red lakes and toners. The following exceptions were noted in two price lists recently issued by major producers:—Barium lithol toners, up 5c. to 98c. per pound; CP para toners, up 6c. to $1.21 per pound; resinated lithol rubine toner, up 7c. to $1.47; and red rhodamine, molybdated, up 20c. to $6.

Violets—These colors have encountered steady and normal consuming demand this season. No price changes are scheduled for the first of the year. PTA methyl violet toner lists at $4.35 per pound and PMA at $2.80.

Yellows—Lightfast benzidine is increasing 15c. per pound on January 1 to $3.40. Other advances in the benzidine group will make AAOT $2.55 per pound and AAA $2.30 per pound, both up 10c. per pound. Hansa 10G is the only other yellow set to advance. It will move up 10c. per pound to $2.45. The various types of regular hansa yellow G are holding unchanged at $2.20 per pound.

Zinc Oxide—September output of zinc oxide has been reported at 13,700 tons, a decline of 12 percent from the level of the previous month and reportedly the lowest monthly level reached since mid-1956. The total included 10,700 tons of lead-free oxide and 3,000 tons of leaded. For the first nine months of the current year, production amounted to 118,100 tons of lead-free and 21,200 tons of leaded zinc oxide, as compared with 115,000 and 18,500 tons, respectively, during the corresponding period of last year.

Synthetic Resins

The following figures show sales in pounds for September and list August's figures for comparison, as reported by the Tariff Commission:

Sales	August†	September†
Phenolic and other tar acid resins:—		
Laminating resins	7,164,456	7,362,031
Adhesive resins	4,847,912	5,202,301
Protective coating resins, modified, unmodified, except by rosin	2,178,014	2,257,161
Urea and melamine resins:—		
Portective coating resins, straight, modified	2,050,179	2,369,676
Styrene resins:—		
Protective coating resins, straight, modified	6,145,104	6,651,007
Vinyl resins:—		
Total all types	63,915,565	65,258,343
Alkyd resins for protective coatings:—		
Phthalic anhydride types, unmodified	9,180,804	10,152,342
modified with tar acids, rosin and/or other materials, except styrene	3,305,846	4,072,495
Polybasic acid types except phthalic:—		
Unmodified	204,165	242,649
Modified with tar acids, rosins and/or other materials except styrene	470,703	351,067
Rosin modification for protective coatings:—		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	1,152,379	1,043,122
Esterified with other alcohols, pentaerythritol, glycols, etc.	852,422	1,003,442
Rosin, rosin esters, modified:—		
Modifications with phenolic and other tar acid resins	1,762,842	1,744,692
Modifications with maleic and fumaric acids	2,385,362	2,553,352
All other modifications	3,011,734	3,470,525
Coumarone—indene and petroleum polymer resins	23,447,900	21,133,962
Miscellaneous synthetic plastics and resins materials:—		
Protective coating resins, (including epichlorohydrin acrylic polyesters, silicone and other resins)	505,496	625,060

† Partly estimated.

Natural Resins

Shellac—Moderate business was consummated last week at price quotations of long-standing. Activity was generally

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Coatings Materials

confined to prompt requirements. Orange grades sold at 39c. to 41c. per pound for lemon No. 1, 37c. for for No. 2, 34c. to 35c. for superfine, 58c. for bleached in bags, and 48c. for bonedry.

A publication recently noted that imports of shellac in October declined to 16,547 bags from a total of 20,714 bags the previous month. This figure was also below the 17,898 level reported for October of last year. October shipments included 600 bags of high grade orange, 700 bags of superfine and only 200 of truly native.

Miscellaneous

Casein—The tone of the market was soft last week with Argentine material quoted at 21½c. per pound, spot, and slighty lower for future shipment. Demand was reported to be slow while production in Argentina was mounting. Amply available Australian casein was said to be exerting competitive pressure on price quotations.

Naval Stores

Buying interest in gum rosin continued at a low ebb in the month of November, according to a report by the Department of Agriculture. Pales grades WG and WW, however, were strong in price owing to termination of the production season and limited supply. Mediums continued about steady, while the scrape crop fell far below earlier expectations.

The weighted average price for all grades on 3,714 drums, f.o.b. plants was $7.79, as compared with $7.75 for the previous month and $8.50 for November, 1956. Total reported sales volume of 12,452 drum equivalents was 828 more than last month and 9,563 less than in November, 1956. Export sales of 4,296 drums showed a 907 drum advance over the level of the previous month and a decline of 5,116 drums from the total for November, 1956. Domestic sales of drums constituted 29.8 percent of the total reported, bags 6.4 percent, hot rosin 29.3 percent and exports 34.5 percent.

The tankcar market for turpentine continued to decline pricewise and on volume of sales in November. However, export sales, which had been low for some time, increased slightly. Overall sales, at 150,086 gallons, were 22,006 more than last month, but 267,969 gallons less than during November a year ago when tank steamer business was active.

Pine Gum—For the week ended October 23 the average price per standard barrel of commercial crude pine gum was reported at $22.21, as compared with $22.04 the previous week and $25.54 a year ago. The volume of gum deliveries to plants amounted to 14,250 barrels, as against 13,115 the previous week and 18,756 a year ago. Average content per barrel consisted of 7.69 gallons of turpentine and 296.8 pounds of rosin. Gum grading percentages ranged as follows:—WW, 1; WG, 3; N, 21; M. 51; and K and below, 24.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Nov.29	Mon. Dec. 2	Tues. Dec. 3	Wed. Dec. 4	Thurs. Dec. 5
Drums—					
I	...	...	...	$7.50	...
M	...	...	...	7.43	...
WG	$7.93	...	...	...	...
WW	...	...	...	8.15	$8.15
Bags—					
K	...	$7.40	...	...	...
M	...	7.40	...	...	...
N	7.55[1]	7.50	...	7.42	...
WG	...	7.75	...	7.77	...

Tankcars (for week ended November 29)—
WW, $7.78; M or better, $7.00

Sales, USDA

1,030* 80* [2]... 353* 240*

New York
(per 100 lbs., c.l., Friday)
WW, $9.40; WG, $9.15; N, $8.85; M-I, $8.75

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.530	...	...	.53	.5125[3]
Sales	6,000[4]	...	...	10,000[4]	16,000[4]

New York, Friday, per gal. 7 lbs., tankcars, 66c.; l.c.l., 82c.

* Drums equivalent. † Gallons. ‡ Average price. [1] Or better. [2] Trading confined to futures. No quotations or totals were reported.

FDA Set

—*Continued from page 3*

the petitioner must supply the agency with complete data on practical methods for quantitative determination of the investigations made with respect to the toxicity or other potentiality for harm.

FDA Man Tells of Work

Speaking before a recent conference of the Food Law Institute with Food and Drug Administration officials, Robert S. Roe, director of the FDA's Bureau of Biological and Physical Sciences, told of some of the reseach work now being conducted by the agency in the area of pesticide tolerances, which could be related to questions involving tolerances for chemical additives, and other research work going on that will have a bearing on enforcement policies of the agency.

He pointed out that one of the agency's most important and difficult responsibilities is the evaluation of the safety of tolerances for pesticide chemicals on raw agricultural products. Petitioners are required to submit toxicological data with respect to the chemicals for which they seek tolerances, which includes feeding tests on laboratory animals.

Seek Safe Levels

FDA scientists appraise the petitions to determine if the data are adequate to show the tolerances levels sought are safe. This involves the application of responsible scientific judgment in interpreting the animal tests in terms of probable effect on another species—man. Margins of safety must be applied because there are many factors that make absolute certainty impossible.

"Hence," Mr. Roe said, "we are conducting much research in the study and development of procedures for measuring toxicity interpretating the results of pharmacological experiments. This work is not only essential to enable the establishment of safe tolerances for pesticide chemicals, but also for the adequate appraisal of food additives of various kinds including coaltar colors."

Propylene Marketing

—*Continued from page 3*

propylene unit constructed in North America specifically for the manufacture of plastic grade propylene, it is reported, and will constitute the source of raw material for the new polypropylene plastic plant recently announced by Hercules Powder Company (OPD, 12/2/57).

Propylene is a pure hydrocarbon contained in refinery gas streams and after separation and purification will be shipped under pressure as a liquefied gas. Propylene in a less pure state is used for the manufacture of gasoline components.

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Fatty Acid Production Showed Rise in October

Production of saturated and unsaturated fatty acids in October was 34.3 million pounds. This figure is about 2.9 million pounds above September, and 1.8 million pounds above production in October, 1956, according to the Association of American Soap and Glycerine Producers.

Disposition in October totalled 32.5 million pounds, up 1.7 million pounds from the September figure, but down 3.4 million pounds from the disposition figure for October, 1956.

Stocks of finished goods at the end of October totalled 30.5 million pounds, about 1.4 million pounds higher than the previous month's figure. "Work-in-process" increased 2 million pounds from the September level.

Cyanamid Plastics Division Gets Manufacturing Manager

American Cyanamid Company's plastics and resins division, New York, has appointed Daniel McC. Collette manager of manufacturing. Mr. Collette succeeds William D. Holland, who was named assistant general manager of Cyanamid's commercial development division (see separate story on page 5). Vladimir J. Wilhousky was named to succeed Mr. Collette as manager of the plastics division plant at Wallingford, Conn.

FDA Gives Clue

—Continued from page 4

for them in food might be established if it can be shown that they are needed in production.

• Magnesium sulfate heptahydrate should be listed on the label of a drug product as epsom salt, its common or usual name.

• FDA would not object to a slight modification of the required cautionary prescription legend on drugs intended for export. The agency will accept this wording: "Caution: Federal (U. S. A.) law prohibits dispensing without a prescription," from a manufacturer who wishes to market a drug under the same label both domestically and abroad.

• As the National Formulary recognizes it under that heading, FDA would not object to use of the term "Estradiol" in drug label references to 17-cis-beta estradiol. It will also accept "Estradiol (formerly known as Alpha Estradiol)."

Octadecylamine in Steam Lines

• Octadecylamine is classed as a poisonous substance and, therefore, may not be used in steam lines of food and drug establishments unless it can be shown that it is required in the production of the food and a safe tolerance is established. FDA adds that it does not object to 2.4 parts of octadecylamine per million in steam lines used for autoclaving surgical instruments and gauze.

• To find out whether a product containing ammonia is subject to the federal caustic poison act, the ammonia content should be calculated as NH_3.

FDA's new system of gathering up its informal policy statements more or less parallels its former "T. C." (trade correspondence) information series which was discontinued in early 1946.

This service served as a guide to uniform interpretation of the law by the FDA staff after passage of the present food, drug and cosmetic act in 1938, and was later made available to others interested.

When the administrative procedure act of 1946 went into effect, the opinions of the FDA staff were formalized and published in the *Federal Register* as statements of general policy or interpretation. Publication of informal comments was discontinued.

Series Urged by Advisory Unit

Pointing out that it has long realized that its formal statements of policy did not entirely take the place of the "T. C.'s," FDA says it hopes that the new informal series will fill the void.

The new series also complies with a recommendation in a 1955 report of the Citizens Advisory Committee on the Food and Drug Administration that a service similar to the "T. C.'s" be restored.

Borane-Based

—Continued from page 3

ery's new breed of solid propellants may be based on decaborane, he also reports that a great number of boron-hydrogen-carbon compounds, developed more or less on the side by the company in the past five years in its liquid borane fuel program, are now being re-examined closely with an eye toward putting them into high-energy solid fuels.

Pointing out the advantages of his company's "Hi-Cal" solid fuel over known hydrocarbon solids, Dr. Schechter indicates that it would take 3,000 pounds of the hydrocarbon fuel (specific impulse 195) to send one pound of weight to escape velocity.

Dramatic Advantage of Boranes

On the other hand, he says that it would take only 100 pounds of a solid borane with, say, ammonium perchlorate (specific impulse 280) to do the same job.

The company, which is owned jointly by Mine Safety Appliances Company and Gulf Oil Corporation, may also conduct research in the fields of oxidizers and other propellant components, Dr. Schechter says.

To give its new solid fuels program a boost, Callery has set up a solid fuel group at its Callery, Pa., research and development division.

The company is currently building a $38 million plant to manufacture diborane, decaborane and pentaborane-type liquid fuels for the Navy at Muskogee, Okla. Completion is expected in the latter part of 1958.

Dr. Schechter sets a target date of April 1 for completion of Callery's liquid fuel plant at Lawrence, Kans. On May 1, he states, the plant should be in full scale operation.

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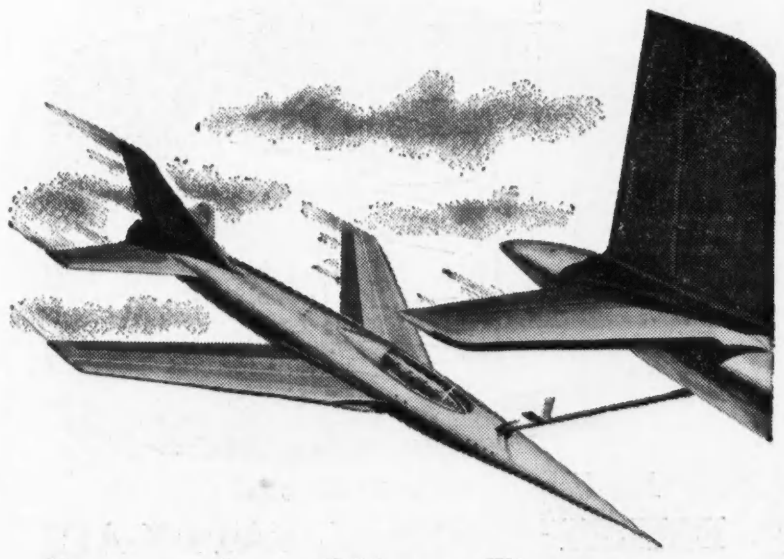

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Oils, Fats and Waxes

Strength of cottonseed oil continued to feature the oils and fats market last week. Offers of crude continued scarce and trading took place at new highs for this season. Trading in soybean oil was light. Market was irregular but closed unchanged. Peanut oil was scarce and higher. Corn oil continued in tight supply, with trading at sharply higher levels. Crude coconut oil remained firm, reflecting the strength of copra. Active interest from European buyers for copra resulted in further advance for replacements.

Steady tone prevailed in tallow and greases. Trading was moderate at unchanged quotations, with sellers asking slightly higher prices. Demand was chiefly from domestic consumers, while export interest lagged. Cash lard was unchanged and merely nominal.

Unsettled Brazilian castor oil market continued to affect the local situation and No. 1 declined fractionally. Trading was light and spotty with quotations shadable on firm bids, according to trade sources. Domestic castor oil also was easier and all grades were lowered ½ cent per pound. Buying interest in tung oil continued slow, which weakened the market and nearby delivery was reduced fractionally. Linseed oil was quotably unchanged, but steadier with the higher flaxseed market. Consumer interest in crude menhaden was inactive and market was entirely nominal at prevailing quotations. Export interest also was lacking. Offerings however, was still limited. Cod oil replacements were quiet and slightly lower.

In vegetable waxes consuming demand continued limited to actual needs, though some improvement in interest was reported for later requirements. Candelilla wax was firmer and advanced 1 cent per pound, with the increased cost of shipments from Mexico. Carnauba grades were unchanged and fairly steady. Offers of crude beeswax from primary sources continued light and strong at prevailing quotations.

Price Trends

Advanced

Candelilla wax, 1c. per lb.
Cocoa butter, 1c. per lb.
Coconut oil, crude, ¼c. per lb.
Copra, $5 per ton
Corn oil, crude, 3/16c. per lb.
Refd., 3/16c. per lb.
Cottonseed meal, $1 per ton.
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Linseed meal, 50c. to $1 per ton.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Reduced

Castor oil, dom., ½c. per lb.
No. 1 Braz., ¼c. per lb.
Cod oil, ¼c. per lb.
Oleostearine, 1c. per lb.
Tung oil, ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 7, 1956
106.18	105.58	102.87	119.85

For Current Prices see page 9

Vegetable Oils

Castor—All domestic grades were reduced ½c. per pound, reflecting the lower cost of imported oil. Trading was slow and confined to immediate needs. Brazilian oil was easy. No. 1 was offered at 18½c. per pound, tankcars, New York, prompt delivery and shadable on a firm bid.

Imports of castor beans and castor oil, at New York and Philadelphia last week were as follows:

	Castor Beans	Castor Oil
	Pounds	
Last week	2,362,500	2,840,000
Previous week	1,889,400	1,868,000
Corresponding week, 1956	2,809,350	600,000
Total this year	27,695,700	101,360,000
Corresponding period, 1956	43,359,000	72,923,000

Coconut—Crude continued firm. Prompt shipment was advanced to 13⅜c. per pound, tankcars, f.o.b. Pacific coast, first half December and 13¼c., second half. At New York crude was unchanged at 14¼c., tankcars, nearby delivery.

Corn—Market was stronger and sharply higher. Offers of crude were light with trading up to 15⅝c. per pound, tankcars, f.o.b. mills. Refined was raised to 19.35c., tankcars, New York, prompt delivery.

Cottonseed—Trend of cottonseed oil futures on the New York Produce Exchange continued upwards last week, reflecting the tight supply situation of crude cottonseed oil and expectations that the government cotton report issued this week will indicate a decline in the crop with some estimates around 10,500,000 bales. Trading in futures was active and prices reached new highs for the season. December delivery led the advance as a result of scarcity of nearby oil. Lack of December tenders was a contributing factor. Hedging became pronounced and were liberal in March delivery. Consuming demand was moderate. Refined salad was raised to 18⅜c. per pound, tankcars, New York, December delivery.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, December 6, follow:

	Sales	Cents per Pound High	Low	Close
Dec.	165	17.16	16.75	17.03@17.08
Mar.	696	16.81	16.45	16.59S
May	353	16.64	16.30	16.40S
July	139	16.49	16.14	16.20@16.25
Sept.	63	15.66	15.31	15.31S

Total sales and switches, 1,416 contracts.

New highs also were registered in crude oil. Sales were made up to 15c. per pound, tankcars, mills, Georgia, Alabama and 15⅛c., in the Carolinas. Sales took place at 14⅝c. in the Valley. In Lubbock 14c. nominal and Waco, 14¼c. nominal.

Disappearance of refined cottonseed oil in October was indicated at 2,555 tankcars by the Census Bureau, compared with 1,645 in September and 2,285, October, 1956. Total for three months ending October amounted to 6,048 tankcars against 6,322 for the same period last year. Visible supply was estimated at 8,061 tankcars October 31 against 15,600 a year ago.

Linseed — Price schedule was unchanged, but a steadier tone prevailed in the market as a result of the advance in flaxseed. Demand for oil was restricted to fill-in needs. Deliveries against contracts were in less demand, which is usual at this season. Raw oil was held at 14.8c. per pound, tankcars, Minneapolis, December-February; 15c., March-May and 15.2c., June-August.

Flaxseed—Market was stronger and advanced 7c. per bushel. Seed offers were light.

Minneapolis.—Crushers advanced bids 7c. a bushel to $3.41 for cash flaxseed as offerings at the lower level were exhausted. Production shut-downs and curtailed crushing was common. Country offerings continued light as producers held for higher levels. Cash market followed Minneapolis December future closely, a penny differential one or two days. Futures advanced 3½c. to 4c. at Minneapolis while Winnipeg contracts soared 12c. to 15c. on investment and export buying. Trades in the spot market totaled only 6 cars and to-arrive bookings were a meager 3 cars and 4,000 bushels. Arrivals for all accounts amounted to 66 cars, compared with 187 a year ago. Shipments totaled 14 cars, against 41 last year.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts 1957-58	1956-57	Shipments 1957-58
Past week	166,250	419,400	24,500
Since Sept. 1	9,249,500	11,488,200	774,500

Oiticica — Trading was reported light and spotty. Tankcars were offered at 17⅝c. per pound, New York, for prompt delivery. Drums were held at 19c. to 19½c., spot, as to quantity.

Olive—Business was spotty, chiefly for spot delivery. Greek oil for shipment was easier and offered at $63 to $64 per 100 kilos, used drums, c. and f. New York, December-January. Shipments from Spain were still unavailable. Tunisian was quoted at $65 to $66 per 100 kilos, new drums, c. and f., New York, prompt shipment. Stocks on spot were light and well held from $2.75 to $3 per gallon, drums, duty paid, according to quality and quantity.

Palm — Trading was spotty. Drums were steady at 15.2c. to 16.2c. per pound, spot, as to quantity and tankcars, 12.6c., prompt delivery.

Peanut—Crude was higher with trading at 16½c. per pound, tankcars, f.o.b. mills,

Oils, Fats and Waxes

prompt delivery. Refined was advanced to 20¼c. per pound, tankcars, New York, prompt.

Off-farm supplies of peanuts, excluding shelled oil stock, amounted to 644 million pounds of equivalent farmers' stock (uncleaned, unshelled) peanuts, October 31 according to the Crop Reporting Board, and were 17 percent above holdings a month earlier but 18 percent below October 31 last year. Comprising these equivalent stocks were 434 million pounds of actual farmers' stock, nearly 9 million pounds of cleaned, unshelled (roasting stock) peanuts, and about 201 million pounds of shelled edibles.

Peanuts crushed for oil, cake and meal from August 1 through October 31 of the current season stand at nearly 56 million pounds, compared with about 21 million crushed during the comparable period in 1956.

Rapeseed — Prices were maintained at 16c. per pound, tankcars, New York, prompt delivery. Demand was spotty.

Soybean—Market irregular and steady. Crude closed unchanged with sales at 11⅝c. per pound, tankcars, Decatur-December and 11¾c., January, same basis. Refined salad was unchanged at 14⅞c. per pound, tankcars, New York, December delivery.

Consumption of crude soybean oil in October was totaled 4,909 tankcars according to the Census bureau compared with 4,358 in September and 5,142, October, last year. Visible supply was estimated at 15,252 tankcars end of October against 16,258 a year ago.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, December 6, follow:

	Sales	Cents per Pound—High	Low	Close
May	6	11.82	11.63	11.65@11.71

Total sales, 6 contracts.

Tung—Market was easier and fractionally lower. Tankcars were reduced to 23½c. per pound, New York, for nearby and 23¼c., second half December. Buying interest lagged. Drums were lower at 25c. to 25½c., spot according to quantity.

Miscellaneous

Cocoa Butter—Market was higher ranging from 95c. to $1 per pound, spot delivered, depending upon quantity.

Copra — Active demand for European account further strengthened shipments. Prompt shipment was advanced to $175 per ton, c.i.f. Pacific coast. Reports from Singapore stated that the market has been demoralized by an acute shortage of copra stocks. This situation has been created by the heavy buying for re-exports to Europe.

Fats and Greases

Greases—Steadier tone prevailed due to improved demand. Yellow was sold in good volume at 8c. per pound, tankcars, delivered, with ⅛c. more asked in some quarters. Choice white was unchanged at 8⅝c., same basis.

Lard—This market was unchanged and quiet. Cash lard remained nominal at 10.85c. per pound, drums, Chicago.

Oleo Oil—Light trading continued for actual needs. Extra ranged from 18¾c. to 19c. per pound, drums, as to quantity. Oleo stearine was lower at 14c. to 14½c. per pound, same basis.

Tallow—This market remained steady. Soapers absorbed moderate lots of bleachable fancy at 8½c. per pound, tankcars, delivered, with ⅛c. more generally asked. Prime ranged from 8¼c. to 8⅜c.; special, 8⅛c. and No. 1, 8c., same basis. Export interest was reported limited. Guaranteed fancy was quiet and quoted at 9¾c. to 9⅞c., drums, f.a.s. Edible tallow was sold on the basis of 11½c. to 11¾c. per pound, tankcars, delivered.

Fish Oils

Cod—Tanked oil for shipment was easy and slightly lower. Prompt shipment was quoted at 10⅜c. per pound, drums, ex-dock. Buying interest was slow. Oil on spot ranged from 11¼c. to 11⅜c., drums, as to quantity.

Menhaden—Buying interest continued to lag both for domestic and export delivery. Offers also were light. Crude was entirely nominal at 8¾c. per pound, tankcars, f.o.b. works and 9c., steamer. Refined grades were in spotty demand. Light pressed was unchanged at 11½c. per pound, tankcars, New York basis.

Cake and Meal

Cottonseed Meal—Market was firmer due to scarcity of stocks. Offers were limited and higher. Trading was moderate. Meal, 44 percent was quoted at $55 per ton, sacked, Memphis; $57, Alabama; $60, Georgia and South Carolina, mills, for December shipment.

Linseed Meal—Improved trading created a firmer tone. Prices advanced 50c. to $1 per ton.

Minneapolis.—Moderate pickup occurred in demand for nearby linseed meal. Prices on extracted advanced 50c. to $1 week while balance of December was steady. Withdrawals against existing contracts were at an accelerated pace, sparked by improvement in feed business and continued cold weather. In-

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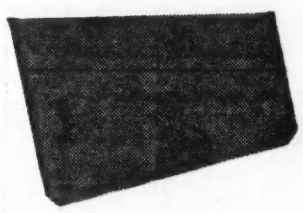

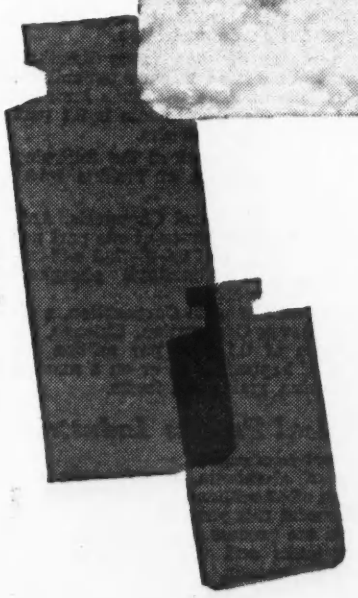

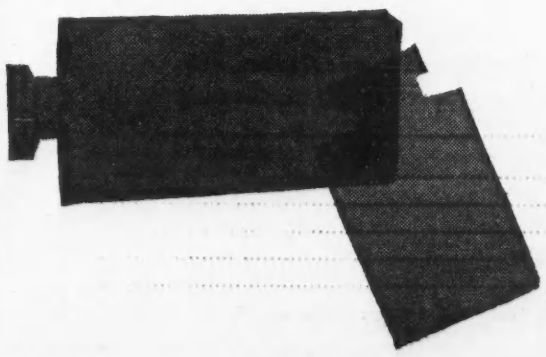

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" —W	1.2R—3Y	" —W	4.4R—18Y
" —X	0.5R—2Y	" —X	4.0R—20Y
" —Y	0.9R—3Y	" —Y	3.8R—16Y

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" —W	4.0R—16Y	" —W	6—7
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Oils, Fats and Waxes

terest in deferred offerings was virtually nonexistent, crushers asking premium of $5 for January. Extracted linseed meal, 34 percent protein, was at $44 to $44.50 December. Expeller, 32 percent, was unchanged at $50.50 for December; $52.50, January; $55.50, February/March.

Shipments of linseed meal, in pound, were as follows:

	1957-58	1956-57
Past week	14,880,000	19,200,000
Since Sept. 1	186,540,000	211,560,000

Soybean Meal—Fair amount of interest developed in this market, prices recovering to previous level after early declines. Strength in futures contributed to more optimistic market tone. Sales reached best aggregate in several weeks. Limited trading reached as far ahead as March requirements, quoted at $1 premium. Soybean meal, 44 percent protein, ranged from $44.50 to $45 a ton, unrestricted, bulk, Decatur.

Waxes, Vegetable

Consumers of vegetable waxes showed more interest in replacements, but actual sales were restricted to small lots for actual needs. Crude candellila was higher due to the increase of 1c. per pound for shipment from Mexico. Refined also was lifted 1c. Carnauba grades moved in limited quantities at unchanged quotations. Offers of crude beeswax continued light and were firmly held. This kept refined grades firm at prevailing quotations. Japan wax was quiet and more or less nominal. Demand for ouricury continued slow.

Margarine Seen Offering Soybeans a Breakthrough

Margarine offers a "breakthrough" opportunity for soybean oil in the food field, Siert F. Riepma, president of the National Association of Margarine Manufacturers, advised soybean growers attending the annual Remington Soybean Show at Remington, Ind., last fortnight.

Since 1945, Mr. Riepma pointed out, per capita consumption of "visible" fats and oils has been relatively stable, averaging around forty-four pounds per year.

During the same period, however, consumption of soybean oil in food fats as a group has increased 111 percent, chiefly owing to margarine production having risen almost 230 percent. Use of soybean oil in margarine since 1945 has increased by 550 million pounds per year, he noted.

During the 1956 crop year all domestic markets, led by margarine, utilized more than 60 percent of total beginning soybean oil supplies.

Margarine alone used 836 million pounds of refined soybean oil, nearly half as much as was exported that year in the form of oil and beans.

FDA Okays Tolerances On 2 Pesticide Chemicals

Tolerances for residues of two pesticide chemicals, manganous dimethyldithiocarbamate and mercaptobenzothiazole, in or on certain raw agricultural products have been given tentative approval by Food and Drug Administration.

The tolerance for manganous dimethyldithiocarbamate is seven parts per million in or on apples. The tolerance for residues of mercaptobenzothiazole is 0.1 part per million in or on apples.

FDA also has announced the following petitions for approval of residue tolerances:

By Geigy Agricultural Chemicals, Ardsley, N. Y., for a tolerance of one part per million for residues of 0,0-diethyl o-(2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate in or on olives.

By Velsicol Chemical Corporation, a division of Arvey Corporation, Chicago, for a tolerance of 0.1 part per million for residues of heptachlor in or on a number of vegetables, grains and fruits.

Chemical Process Industries

—Continued from page 5

cations of aluminum, representing consumption of 47 million pounds of the lightweight metal this year. The applications featured are process pipe, heat exchanger tubing, tanks and vessels, hookups for tanks and vessels, insulation jacketing, chemical drums, chain link fencing, and instrument air lines.

The exhibit also highlights the use of aluminas as raw materials.

"Within the last five years aluminum has been accepted as a major material for construction," Mr. Moore noted. "Previously aluminum was considered only for use in special applications.

"We expect an even greater growth in aluminum use in chemical process industries in the next few years. By 1960 at least 92 million pounds will be used, according to our market projections."

Volume-wise, the greatest increase in consumption was predicted for tanks and vessels and their hook-up lines. Usage for this application is expected to grow from the present 25 million pounds of aluminum to 45 million pounds in 1960.

Other projected industry-wide increases are as follows: Chemical drums, two million pounds to five million; process pipe, 10 million to 15 millon;; heat exchangers, two-and-a-half to five million; jacketing, 5 million to 15 million; and structurals and miscellaneous, 2.5 million to 7 million.

Flaxseed Minimum Price Dropped During December

Department of Agriculture has dropped the fixed minimum price in competitive bid sales of flaxseed during December from stocks of the Commodity Credit Corporation.

The department said that sales of flaxseed in carlots as available will be made for domestic crushing or for export on competitive bid basis in store Duluth or Minneapolis, except that less carload lots will be available at the best prices obtainable.

The announced change in the condition of sale of flaxseed was made in the monthly list of products being offered for sale by the department from the stocks held by CCC, which also said that starting with December minimum pricing of soybeans is being shifted to a new crop (1957) basis.

In addition to flaxseed and soybeans, the list of CCC products being offered for December again includes nonfat dry milk, grain sorghums, gum rosin, and gum turpentine.

Geraniol Is Being

—Continued from page 3

program was aimed at providing a range of terpene alcohols and related armoatics of extreme purity, at stable prices and in plentiful supply.

According to Dr. Stallcup, these products, of which geraniol is an example, are synthesized from turpentine by entirely new methods developed in Glidden's research laboratories. For the first time, geraniol is made available in the United States from raw materials entirely of domestic origin and not subject to quality vagaries due to soil, climate and locale. The new route to geraniol moveover assures consumers of supply regularity, price stability and material uniformity.

Geraniol standard is reported to be of extremely high quality, having a minimum total alcohol content of 98 percent. While containing the alcohols associated with the product derived from citronella oil, it is free from terpenes and sesquiterpenes. It is expected that this geraniol will be used as a direct replacement of high quality geraniol produced from citronella oil. Geraniol standard is readily available to consumers at competitive prices, it was reported.

Glidden announced an arrangement with A. Boake, Roberts & Co., Ltd., of London, England, to manufacture geraniol in Europe.

Adipic Acid

—Continued from page 7

"Pillar-Pac" reduces the expense and trouble involved in handling ton lots of adipic acid. No investment in expensive handling equipment is necessary, since the container can be moved with a conventional fork-lift truck.

The new bulk shipping unit consists of a 57-inch long corrugated fiberboard tube, or sleeve, encased in a flanged rectangular corrugated body (33⅛" x 33⅛" x 57"). Interior surfaces of the container contacting the adipic acid have a special water resistant finish. The top and bottom of the container have easily removable corrugated covers (36 x 36), for quick emptying. The entire unit rests on a built-in pallet.

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Benjamin Moore Makes Sweeping Personnel Shifts

B. M. Belcher, president of Benjamin Moore & Co., New York, has announced the following personnel changes effective December 3, 1957:

F. E. Wellersdieck, director of purchases, has retired after serving the company for more than 47 years; Robert C. Muhlhausen has been appointed director of purchases.

Maurice C. Workman, jr., has been named assistant controller, and Charles L. Neuberg has been appointed financial manager of the Los Angeles branch.

Other executive changes: Charles H. Messerve, appointed assistant general manager, eastern division; Ellis E. Snee from eastern division to St. Louis, Mo., branch as assistant sales manager; and Elmer P. Christensen named assistant sales manager, Chicago branch. Also, Roland V. Wagoner, assistant sales manager, St. Louis branch to supervise southwest sales activities with headquarters at Houston, Tex.; Peter T. Carolan to eastern division purchasing agent; and Michael Quaid to eastern division credit manager.

Drug Session Is Briefed

—Continued from page 7

ert P. Fischelis, and secretary-treasurer, Ray Schlotterer.

A discussion on the labeling of hazardous household products was introduced by a paper, presented by John Williamson, American Cyanamid Company, and chairman of the labels and precautionary information committee of the Manufacturing Chemists Association. The discussion highlighted the fact that proper labeling was the responsibility of industry, and if not done by industry, it will be done by legislation. Further, it promotes good public relations, it was pointed out.

Philip Ryan, executive director of National Health Council, and T. J. Golden, director of professional relations, National Association of Chain Drug Stores, presented papers on the manpower problems in the health professions. The delegates discussed the problem of whether there were "sufficient" or "insufficient" graduate pharmacists. Both agreed that active measures should be undertaken to interest students to enter all branches of the health profession.

Government Interference

George Frates, Washington representative of the National Association of Retail Druggists, discussed the growing trend of the government stepping from the field of regulation and getting into the distribution of drug products. The many problems arising from the circumventing of the existing channels of drug distribution were highlighted.

Dr. Karl Bambach, executive vice-president of the American Drug Manufacturers Association, spoke on the trends in international drug regulations, reviewing the opinions expressed by delegates at the recent Fourth Pan American Congress of Pharmacy, held in Washington, D. C.

The Committee and Sub-Committee on Uniform State Legislation, presented for consideration by the delegates, the Seuss report, which was financed by the conference so as to obtain a national picture of the types of pharmacy acts now operating in the various states.

James F. Hoge, Proprietary Association legal counsel, in his report on legislative trends, stated that today all states, except four, have working delegations, commissions or committees which meet the year round; outside of past prescribed legislative sessions. Hence the review of proposed, or consideration by the industry of contemplated, state legislation is becoming a complex, year round problem, he said.

N. E. PVLA Party Slated

The New England Paint, Varnish and Lacquer Association will hold its annual Christmas Party at the Statler hotel, Boston, December 12.

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1—Bird 36" x 50" Steel, Solid Bowl, Continuous Centrifuge.
1—Bird 40" suspended, rubber covered, perforated basket, Centrifuge.
2—AT&M 42" suspended, Stainless Steel, perforated basket, Centrifuge.
2—Tolhurst 40" suspended, steel, perforated Centrifuge.
1—2000 gal. 304 S.S. vertical, agitated, jacketed Tank.
1—5500 gal. rubber lined 10' x 9' vertical Tank.
1—10,000 Aluminum 10' x 16' horizontal Tank.

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1—9,400 gal. 316 ELC, Horizontal Tank, 8½' dia. x 19'.
1—12,000 gal. rubber lined Horizontal Tank, 10'6" x 20'.
3—Stainless Heat Exchangers, 1220, 947 and 500 sq. ft.

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4—Bird 32" x 50", 316 S.S. solid bowl, continuous, fume tight, 60 HP motors, New 1953.
2—Bird 18" x 28", 24" x 38" Stainless Steel, Continuous, solid bowl.
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1—Tolhurst 32" Suspended, 304 S.S. perforated basket.

FILTERS

2—Feinc 5'x6' Stainless Rotary Vacuum.
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1—Baker Perkins No. 16 TRM, 150 gal., jacketed sigma blades, Vacuum, 60 HP motor.
1—Baker Perkins #15USE, 100 gal. jacketed, Stainless Steel, Vacuum, 75 HP.
1—Baker Perkins No. 15 VUMM, 100 gal. jacketed, dispersion blades, 100 HP motor.
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MILLS

1—International 6'x7' porcelain lined Pebble Mill, 30 HP motor.
2—Abbe 5'x6' and 4'x5' Silex-lined Pebble Mills.
1—#2DH Mikro Pulverizer, 15 HP motor.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven. NEW.

MISCELLANEOUS

3—25 ton Freon Refrigerating Units.
10—Orville Simpson Double Deck Rotex Sifters, 60"x84", 40"x84".
3—Robinson Gyratory Sifters 30"x104", triple deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
10—Nash Vacuum Pumps H7, H6, H5, L5, H4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 5".

Partial List of Values—Send for News Flash!

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PERRY EQUIPMENT CORP.

PRIME PROCESS EQUIPMENT

JUST PURCHASED

1—3'6" x 15' Rot. Vac. dryer.
1—Louisville 6' x 45' rot. steam-tube dryer.
3—Davenport #1A Dewatering Presses.
3—42" x 120" Double Drum Dryers.
5—H. K. Porter 6' x 5' Pebble Mills, Stone lined.
3—2950 gal. stainless trailers.

CONDENSERS & EXCHANGERS

3—1070 sq. ft. Stainless Steel Tubular Exchangers, ASME, 150#.
1—910 sq. ft. Admiralty tubes, steel shell & heads.
3—Stainless Steel Coil Condensers—40 sq. ft. & 55 sq. ft.
10—Stainless Steel Shell & Tube—13, 55, 135, 183, 200, 250, 375, 425, 1070 sq. ft.
10—Copper Shell & Tube—95, 108, 185, 275, 525, 660, 685, 750 sq. ft.

COLUMNS

1—48" dia. x 23 plate copper bubble cap column.
2—Copper Beer Still; 48" dia. x 20 plate, 54" dia. x 12 plate.
2—Aluminum, Bubble Cap: 36" dia. x 45 plate.
6—Copper, Bubble Cap: 24" dia. x 11 plate, 36" dia. x 20 plate; (2) 42" dia. x 20 plate; 42" dia. x 40 plate; 48" dia. x 20 plate; 48" dia. x 24 plates.
4—Copper, Tunnel Cap: 24" dia. x 30 plate; 36" dia. x 27 plates; 36" dia. x 39 plate; 36" dia. x 59 plate.
3—Stainless Steel, packed type: 8" dia. x 26' T347; 14" dia. x 25' T304; 24" dia. x 27' T304.
1—Stainless Steel Rotary Plate Spray Type, 30" dia. x 41 plate T304.
3—Stainless Steel Perforated Plate, 42" dia. x 18 plate, T316 plates, steel shell.
1—Stainless Steel Bubble Cap Section T347, 48" dia.—6 plates.
1—Stainless Steel Bubble Cap, 64" dia. x 13 plate, T400 series.

CRYSTALLIZERS

2—Swenson-Walker Crystallizers—30' long. Jktd.
3—B—S Horiz. 16" dia. x 17' long.
1—450 gal. Stainless Steel Jktd. & Agit. Crystallizing Tank, 5 HP.
1—B—S Stainless Steel Jktd. & Agit. Crystallizing & Evap. Kettle, 25 HP.

COOLERS

2—Hardinge Rotary Coolers, partially submerged type, 8'8" dia. x 30' L and 8'8" dia. x 70' L.

1—Counterflow Pipe Cooler—3700 sq. ft., steel pipes.
1—Vogt Stainless Steel Pipe Cooler, 500 sq. ft. sprayed surface.
1—Stainless Steel Spill Cooler—282 sq. ft. tube surface.

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Autoclaves, Blenders, Centrifugals, Columns, Dryers, Dewaterers, Evaporators, Exchangers, Filters, Kettles, Mills, Mixers, Presses, Tanks.

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FIND IT IN THE WEST

2—6' x 45' Louisville Flame Dryers
2—6' x 50' Louisville Rot. Steam Dryers
5—4' x 30' Beaird Dryers, Mtrs & drives
1—Proctor-Schwartz 8' x 50' Apron Dryer
1—42" x 90" Double Drum Dryer, Buflowak
2—Link-Belt Rete-Louvre Dryers 207-10, 310-16
1—Komarek-Greaves 15 TPH Briquetting Press
2—Sharples D-2 type 316 S.S. Filters
2—Sharples C-27 Super-D-Hydrators, S.S.
2—A T & M 42" susp perf basket Centrifuges
1—Sharples PN-14 Super-D-Canotr, 15 HP
1—Elmco 8' x 8' Rot. Cont. Filter, Complete
1—Sweetland #2 Filter, 9 bot lvs 4" centers
1—Oliver 8' x 10' Cont. Vacuum Precoat Filter
1—Day 14" x 30" High Speed Paint Mill
1—Lehman 15¾" x 39½" High Speed Mill
1—Raymond 3 Roller High Side, Cone Separator
1—Williams 4 Roll High Side Whizzer Separ
1—Fitzpatrick Model K Comminuting machine
14—Syntron Spiral Vib. Elevators, 8'6" lift
4—Jeffrey Vib. Conveyors, #3MC-8",9' long
2—Rietz RD-18 Disintegrators, 75 HP motors
8—Lightnin Model SEV side enter Agitators
1—Readco 25 gal dbl arm Sigma jktd Mixers
1—Baker-Perkins sigma Mixer, 33 x 37½ x 30"
1—Sturtevant 1½ ton Mixer, 75 cu ft batch
1—11' dia x 15' Stainless Steel Tank
8—5'6" x 30' Pressure Tanks, 300 # W.P.

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SPECIALS

Reactors: Pfaudler 300 gal. stainless.
Ball Mill: Patterson chrome mang., 26" x 42", water jack., 7½ hp.
Filter: Sweetland with Ingersoll pump.
Percolators: Pfaudler, stainless, 54 x 42".
Tank: 2000 gal. stain. st. jacketed.
Dryer: Bowen lab. spray type, st. st.
Crystallizers: 500 gal. stain. jack.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber.
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STEIN EQUIP'T

DRYERS AND KILNS
1—Allbr. Nell 4x9 Atmos. Drum Dryer.
1—Buffalo Vac. Drum Dryer, 24"x20".

CENTRIFUGALS AND CENTRIFUGES
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter, 12 Stainless covered leaves & other sizes. Oliver Filters.
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Sperry and Shriver 6" to 36" iron & wood.
Ertel 6 & 10 disc Filters 12¼" dia.

KETTLES AND TANKS
3—100 gal. Stainless Clad Jack. Kettles.
Dopp 350 gal. Agit. Jack. Cl Vac. Kettle.
2—Impreg. Units 30" & 36" dia. complete.
6—Jack. Steel Kettles up to 3000 gals.
1—250 gal. Lead Lined Kettle.
Stainless, alum., copper, glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS
4—Mikro Pulverizers, #2TH, #4 & Bantam.
Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42", 4'x5'. Also jar mills.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Bauer 24" Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S & Premier 1½ HP Colloid Mills
Eppenbach QV81 Stainless Colloid Mill 5HP.

MIXERS, SIFTERS & SCREENS
Day Imperial 75 & 150 gal. Jack. Mixers.
Day Jumbo, 700 gals., Mixer.
Lancaster 6' dia. Vert. Mixer, 25 HP.
Kent 3 HP, continuous Dry Mixer.
Baker Perkins, 50 & 100, gal. Jack. Mixers.
Blystone 3000# horiz. Spiral Mixer.
Read 50 & 100 gal. double arm Mixers.
Read 80 qt. vert. Mixer, 3 speed.
Day Stainless 40"x84" Roball Sifter.
Tyler 3'x5' Vibratory 2 deck Screen.
Robinson 20"x48" Gyro Sifter, 3 opening.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
10—Portable Elec. Mixers, ¼ to 5 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS
Oliver 2B rubber lined Diaphragm Pump.
9—Single Punch & Rotary Tablet Machines, ½" to 4" sizes, Colton, Stokes and Kux.
Anderson & French Oil Expellers.
Fillers Powder & Liquid. Labelers.
Pneumatic Seale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine. Buffalo, Stokes Vac. Pumps.
Boilers—Gas & Oil, conveyors & Elev.
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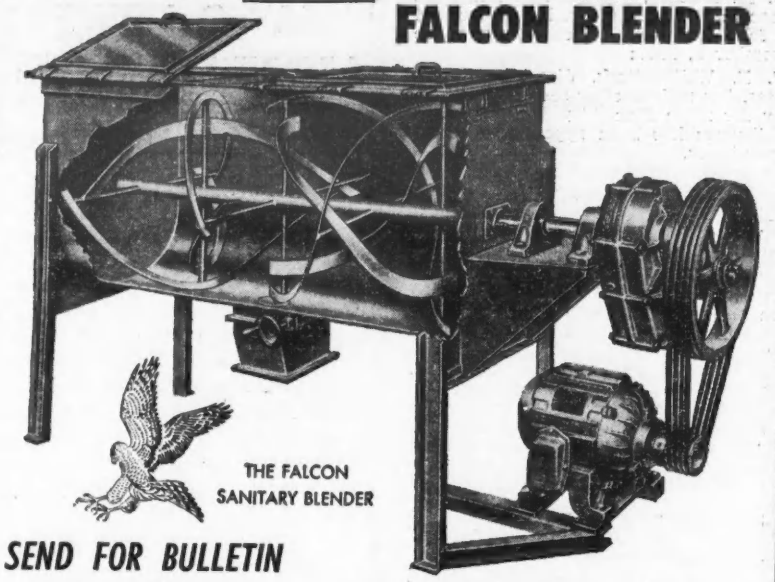

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FMC

S/S Vacuum Stills; 755 gal.; 4'6"x6' and 425 gal. Jktd. Still; 56"x50".
Mikro Pulverizers from Bantam size to No. 4 with motors and accessories.
International Porcelain Lined Pebble Mills 8'x8' with 50 HP direct geared motors.
Rotary Cutters by Abbe, Ball and Jewell, Munson, others; from Lab. Size to No. 1.
Fitzpatrick Comminutating Mills, Model K in S/S 20 HP and Model D with 15 HP motor.
Mojonnier S/S Vacuum Pans 3'x10' and 6'x12' with accessories.
Hersey S/S Gas Fired Rotary Counter Current Atmospheric Dryer; 5'x26' complete.
Tolhurst 40" Rubber Covered Centrifugals with Monel Plow.
Sharples H2 Nozzlejector with 15 HP XPL motor; 1000 GPM.
Day Cincinnatus 1000 gal. S/S Mixer; Jktd., 75 HP motor.
Blaw Knox S/S Resin Still; or Jacketed Autoclave, 7'6"x7'6".
Readco S/S Jktd. Vacuum Dryer and Mixer, 120 gal. 24"x48" with Condenser, Pump, etc.
Sperry 36" Aluminum Filter Press, 4 eye; 33 chambers; with Hydraulic Closure.
T. Shriver 36" STEAM JACKETED Filter Press; Cast Iron; 29 Chambers; a rare one.
2 Plastic Extruders; Royle No. 3 and NRM 2½" Screw; oil heated; controls.
Large Stock of Stokes Rotary Tablet Presses; RB2; BB2; RD3; DDS2; Colton 10-35.
Baker Perkins (W. & P.) Jacketed Mixers; heavy duty dbl. arm; Jktd. up to 300 gal.
8 S/S Heat Exchangers or Condensers; to 1000 square feet of surface.
Barnstead S/S Steam Heated Water Still; capacity up to 100 gallons per hour.
Baker Perkins Stainless Steel 100 gal. Vac. type Double Arm Mixer, 75 HP.

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3—Stainless Steel Rotary Dryers, 30"x12', 3'x20', 4'x20'.

1—Stokes Stainless Steel Rotary Vacuum Dryer, 3'x15'.

1—J. P. Devine Steel Rotary Vacuum Dryer, 5'x33'.

2—Stokes Rotary Vacuum Dryers, Model 59A and 59AA.

6—Stokes Single Door Vacuum Shelf Dryers, 6 shelves.

4—Stokes Single Door Vacuum Dryers, 4 shelves.

1—Louisville Rotary Steam Tube Dryer, 8'x45'.

1—Sprout Waldron Steel Ribbon Blender, 336 cu. ft. capacity.

2—Louisville Rotary Steam Tube Dryers, 6'x50'.

1—Columbia Engineering Rotary Dryer, 6'4"x45'.

2—Louisville Rotary Dryers, 6'x 50'.

1—Bartlett & Snow Rotary Dryer, 4'6"x36'6".

2—Pfaudler Glass lined 1000 gal. Series R. Reactors.

1—Stokes Double Drum Dryer, 5'x 12'.

1—Traylor Rotary Dryer, 4'x40'.

1—Buflovak Double Drum Dryer, 42"x120".

1—Buflovak Double Drum Dryer, 32"x90".

1—Leader Stainless Steel Jacketed Ribbon Blender, 40 cu. ft.

1—Sprout Waldron Type 316 Stainless Steel Ribbon Blender, 30 cu. ft.

1—Sprout Waldron Stainless Steel Jacketed Ribbon Blender, 30 cu. ft.

1—Baker Perkins 150 gallon Double Arm Sigma Blade Jacketed Vacuum Mixer with 60 HP Motor.

1—Baker Perkins Stainless Steel Double Arm Sigma Blade Jacketed Mixer, 100 gallons.

1—Pfaudler 1500 gal. Type 316 Stainless Steel Jacketed Reactor complete with agitator, drive and motor, 50# jacket pressure.

3—Robinson Type 316 Stainless Steel Double Arm Sigma Blade Jacketed Mixers, 400 gallons with 60 HP motors.

1—Baker Perkins 100 gallon Double Arm Sigma Blade Jacketed Mixer.

1—North Erie Double Arm Sigma Blade Jacketed Vacuum Mixer, ½ gal.

2—Williams Type 316 Stainless Steel Hammer Mills, Size 8½x30½".

1—Mikro Bantam Stainless Steel Pulverizer.

1—Pfaudler 1500 gallon Jacketed Monel Reactor, complete with agitator, drive and motor, 50# Jacket pressure.

1—2000 gal. horizontal Type 316 Stainless Steel Still, complete.

2—Glascote 150 gallon Glass-lined Jacketed Stills, complete with 44 sq. ft. glass-lined Condensers and 50 gallon Glass lined Receivers.

1—AT&M 42" Type 347 Stainless Steel Suspended Type Centrifuge, complete with perforate basket, plow and motor.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

EQUIPONOMICS

BLENDERS—Ribbon 1250±, Jacketed.
HOMOGENIZER — Gaulin, S.S. 500GPH, 5000PSI.
SIFTER—Patterson, 2 Deck 40"x60", MD.
OLIVER VACUUM FILTER—316 s. s. 3'x6'.
FILTER PRESS—36"x36", 34 Rubber Covered Frames 1½".
TANKS—S. S. 500 Gal, Agit., Vert.
CENTRIFUGE—Tolhurst 26" Susp. Monel.
PFAUDLER KETTLE—G/L. Jack., 300 Gal.
Sharples Super D-Hydrator C-20, 316 S.S.
KNEADER—Day, 2½ gal., Jack. Vacuum Cover, 5 HP.
HARDINGE BALL MILL—4½'x16", 30 H.P.
CHARLOTTE COLLOID MILL—S.S. 40 H.P.

BIRD CONTINUOUS CENTRIFUGES
18"x28", 24"x38", 36"x50", S.S. 316

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ECH SPECIALS

Stokes Vac. Shelf Dryer, 18 shelves, 40"x44".
Devine Vac. Shelf Dryer, 6 shelves, 40"x43".
Pfaudler Glass Evap. Dish, 130 gal., 40"x24".
Kinetic S. S. Dispersion Mill 4B with 60 HP.
Link Belt S S Rotary Dryer, 5' x 20'.
Nash Hytor Vac. Pump, ±6, 40 HP motor.
Pfaudler Glass Crystallizer, 38" I. D. x 42".
2 W & P Jktd. Mixers, 15 gal., 15 HP.
Pfaudler Glass Kettles, Jktd., 50 gals. up.
Gen. American 42"x120" Twin Drum Dryer.

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1—Stainless Tank ±430 Chrome, vert, 7' x 10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—2 gal. B.P. Stainless Lab. Mixer.
1—Sperry Filter 42", open del, 40-plates, 41-frames.
60—New Pressure Cookers, 18" x 18" & 24" x 28"
1—New Glass Nash Centrifugal Pump, 160 gpm.
1—New Nash Vacuum Pump Type AL-572.
1—Buflovak Jacketed Impregnating Tank 42" x 52".
1—Stedman Disintegrator size 40-6.
1—Jeffrey Vibrating Conveyer 12" x 6", 15' lg.
1—Nash Air Compressor, Type AL 623.
1—Manton Gaulin Stainless Homogenizer 125 gph.
1—I&R Vacuum Pump, 5 H.P., 60'.
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Raymond 9" Hammer Mill, like new.
2—Louisville Steam Tube Dryers 6' x 35'.
1—New Louisville Continuous Filtering Machine.
S.S. Closed Tank with Coils & Agitator, 1000 gals.
S.S. Closed Tank, jacketed with Agitator, 150 gal.
1—±316 Stainless Reactor, 265 gals. cap., jacketed, Abbe Pebble & Tube Mill 5' x 22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 17" x 27".
1—Patterson Ball Mill, 42 x 36 jacketed.
2—Large Steam Jacketed Horizontal Mixers.
2—Ribbon Type Mixers, 50 & 90 cu. ft.—like new.
1—Davidson Vacuum Pump, new, 9 x 12 x 12.
2—Ball & Jewell ±2 Cutters with 75 H.P. Motors.
1—J. H. Day 3 roll Mill 10 x 16.
3—3000 gal. Jacketed Kettles with Turbo Agitators.
1—±10 Day 300 gal. Jacketed Sigma Blade Mixer.
4—New Heat Exc. 60' with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—4' x 8' Shaker Screens.
6—W & P Mixers, jacketed, heavy duty, sigma blade 300 gal. with hydraulic dumpers.
3—Baker-Perkins Mixers—same as above.
2—Sperry 30" Filters, clsd. del., 39-pl. 40 fr.

H. LOEB & SON 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

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LEXINGTON — OHIO

1—Buflovak F-20 Single Door Vac. Shelf Dryer—42" x 42" shelves & S.S. Trays.
1—Tolhurst 30" S.S. Extractor.
1—Stainless Steel Tank 1200 gals.
3—Stainless Steel Tanks 750 gals.
2—Lightnin' Exp. Pf. Agitators ½ & 1 H.P. 430 rpm.
1—Sparkler 18" Jacketed Filter.
1—125 gal. S.S. Jacketed & Agitated Kettle.
2—Steel Tanks 750 & 2000 gallons.
2—Westco Pumps 10 gpm.
1—Gump #36 Vibrox Bag Packer.
1—Walter Kidde Fire Protection System (new).
1—Beckman Model B Spectrophotometer.

Many other laboratory items.
All above installed 1953—Still erected.

FULL DESCRIPTION IN BULLETIN A-40.

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The Machinery and Equipment Corp.
393 Frelinghuysen Ave., Newark 12, N. J.
TAlbot 4-2050

PULVERIZERS—Lab — bronze Raymond, M20 Quaker City (7½ HP) new, Williams AKB (25 HP), Jeffrey 36 x 42 (125 HP).

SCREENS—3 x 5 (1) & 3 x 10 (2) Tyler Hummer, 40 x 84 (2) Rotex, 40 x 84 (2) Roball, 40 x 120 (2) Rotex.

FEEDERS—Syntron FM-O-10, F 11, F 21 (S/S) Jeffrey 2A-W/Rectifiers.

BAG PACKER—St. Regis 100LS (unused) single spout for 100# valve bags, complete w/motor.

MIXERS—2/3 c.f. cone—16 c.f. double cone (Pat Kelly)—5 c.f. Lancaster EBG3, EAG3 9 c.f. Lanc. EAG 4.—14 c.f. Clearfield 610.

ROTARY DRYERS—24 x 20, 36 x 25, 44 x 25.

MILLS, PEBBLE—18 x 24, 24 x 24, 30 x 24, 40 x 48, 60 x 48 (new lining, new 7½ HP gearmotor), 72 x 60 porcelain, 6 x 9 Buhrstone.

MILLS, HARDINGE, CONICAL—4½ x 16, 7 x 22, 7 x 48 Buhrstone lined w/motor drives.

FORK LIFT TRUCKS—2000# Hyster 12' lift, 6000# Yale 8' lift, w/cab, pneumatics, gasoline.

OVEN—2' x 3' x 32', gas fired, continuous, Laminating 4000 cfm, 325° F, like new.

EXHAUSTERS—2500 cfm clarage—4500 cfm Buffalo 8000/12000/18000 cfm American 35000 cfm sturtevant (unused)

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

MACHINERY FOR SALE

1—Baker Perkins 200 gallon jacketed double arm mixer.
1—Baker Perkins 50 gallon jacketed double arm mixer.
2—Baker Perkins 7/10 gallon jacketed double arm mixers.
3—Fitzpatrick comminuters, model D and K.
1—#5 Mikro atomizer, stainless.
2—Stokes rotary vacuum dryers, 18 x 42" and 30 x 8".
1—Stokes 43-B oscillating granulator, stainless
8—Stainless cone blenders, 7, 12 and 23 cu. ft.
2—Nickel clad tanks 2500 gallons.
1—Morehouse mill, SS-30, 30 HP.
2—Sperry 24" cast iron filter presses.
1—Sperry 24" Everdur filter press.
1—Shriver 24" lead filter press.
1—3000 gallon stainless tank.
1—300 gallon stainless steel jacketed and agitated kettle.
1—Pfaudler 300 gallon jacketed glass lined still.
2—Devine 10 shelf vacuum dryers, 40 x43"
2—Alsop 12" pressure filters, stainless.
1—Stokes model T single punch tablet press.
1—Stokes RD-4 rotary tablet press.
2—Sprout Waldron 24" knife cutters, 20 HP.
1—7' x 20' x ½" steel rotary cooler.
1—Bird 18 x 36" solid bowl centrifugal.
2—Buflovak double drum dryers, 24 x 36", 32 x 52".
1—American Tool 40" suspended centrifuge, bronze basket.
4—Patterson 250 gallon jacketed steel ball mills.
1—Ross 50 gallon pony mixer.
2—7500# double ribbon mixers.
1—Stokes freeze dryer model 138-B stainless.

CHEMICAL & PROCESS MACHINERY CORP.
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OIL, PAINT AND DRUG REPORTER, *30 Church St., New York 7, N. Y.*

EQUIPMENT OFFERED

For Sale: 24" x 36", 32" x 120", 42" x 120" Atmospheric double drum Dryers; four stainless sanitary shell and tube Heat Exchangers to 150 sq. ft.; Double Effect Evaporator having 1,133 sq. ft., stainless type 316. Best Equipment Company, 1737 Howard Street, Chicago 26, Illinois. AMbassador 2-1452.

EQUIPMENT WANTED

Mixer—Double Arm type. Baker Perkins, W & P or other. Jacketed, vacuum lid. Heavy duty. 100-250 gal. 50-100 HP. OPD 477.

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Packaging-Packing-Shipping private brands. Our plant located in Long Island. Equipt to package non-inflammable chemicals and allied products. Have ample space and manpower. Write stating your requirements. OPD 482.

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Refined Solvents: below market—clearing our 1957 inventory—Approximately 8,000 gallons of each of the following: Benzol, carbon tetrachloride; cyclohexanone; hexane; heptane; isobutanol; MEK and MIBK mixture; MIBC; mineral spirits; xylol; odorless mineral spirits; tetrahydrofuran; dark colored DOP. Mercury Chemical Corp., 45 Janet Lane, Springfield, N. J. DRexel 6-3220-1.

Continuous By-product supply: Oil Soluble Chlorophyll; Menthol (low Melting); Heliotropine Terpenes; Limited supply; Sodium Benzoate Tech.; Menthol Terpenes; All below market. Special Sulfanilamide USP. Industrial By-Products & Surplus Co., 40-40 Lawrence St., Flushing 54, N. Y. INdependence 1-4100.

POSITIONS OFFERED

Assistant Sales Manager—must have experience in either purchase and sale or surplus chemicals and solvents or in the refining of by-products and solvents. Liberal salary, expense acount plus profit participation. Write Abbey Chemical Corporation, 45 Janet Lane, Springfield, New Jersey.

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Newly Organized corporation located in Boston seeks manufacturers of chemicals to represent on resale basis for the New England states. Personnel has substantial and varied experience in chemical sales to New England acounts. Reply OPD 481.

Bids Wanted

Aluminum Paste, standard lining, 9,972 lbs., Bid. No. 4-1239 Dec. 16. Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Aluminum Sulfate, for water treatment, 1,920,000 pounds. Bid No. 927 GW, Dec. 19, Procurement Div. Panama Canal Co., 21 West St., New York 6, N. Y.

Aluminum Sulfate, gran., 22,000 lbs. Bid No. 176, Dec. 12. Procurement Div. McClellan AFB, McClellan, Calif.

Asphalt, 85-100 penetration, 1,200 tons. Bid No. 152CE, Dec. 18. U. S. Army Engineers, Foot of Rytania St., New Orleans, La.

Carbon Dioxide, 28 gram cap. spec. C-25369, 14,000 each. Bid No. 47, Dec. 30, Army Transport Depot, 12th & Spruce Sts., St. Louis, Mo.

Cresylic Acid, 1,007 gals. in 53 gal. dms. Bid No. 176, Dec. 12. Procurement Div., McClellan AFB, McClellan, Calif.

Drugs phenobarbital and belladonna tabs., potassium iodide, quinine. Bid No. A-163, Dec. 18. Procurement Div. Veterans Adm. Washington 25, D.C.

Benzidene, glycerine, fuchsin vitamin A blue stains. Bid No. 4L-8303- Dec. 18, Gen. Services Adm. 7th & D Sts., Washington 25, D.C.

250,000 bots. tetracycline phosphate 250 mg. complex tablets. Bid No. A-181, Dec. 11, Procurement Div., V.A. Adm., Washington 25, D.C.

Hydroiodic acid, hydrochloric acid, hydrogen peroxide, iodine. Bid No. A-159, Dec. 17. Procurement Div. V.A. Administration, Washington 25, D.C.

Hydrocortisone acetate suspension, 12,960 bots.. Bid No. 83 Dec. 16. Medical Supply Agency, Military, 84 Sands St., Brooklyn 1, N.Y.

Enamel, boot toppong black 1,000 gals., and 7,500 gals. Bid No. 4-1242, Dec. 17. Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Exterior alkyd dull black, 2,100 gals. and 1,075 gals. Bid No. 4-1226, Dec. 16. Gen Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Linseed Oil, raw, 4,355 gals. spec. O-369. Bid No. 4-1234, Dec. 17. Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Paints, vinyl alkyd spec. 52-P-5B 500 gals. black 1500 gals. red 96 qts. yellow 4,100 gals. antifouling. Bid No. 219, Dec. 20 Coast Guard Supply Center, 31st & 3rd Ave., Brooklyn, N. Y.

Inside white, spec P-47A, 500 gals. Bid No. 59 CE, Dec. 12, U. S. Army Engineers Office, P.O. Box 97, Memphis, Tenn.

One coat flat white, 3,024 gals. Bid No. 4-1218, Dec. 13, Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

20 gals. interior enamel black, black semigloss 44 gals. 500 gals. interior flat white. Bid No. 45, Dec. 12. Purchase Division, Bldg., No. 4404. Fort Jackson, S.C.

Primer, exterior house, 1,200 gals. Bid No. 4-1240, Dec. 17, Gen. Stores Supply Office, 700 Robbins Ave. Phila. 11, Pa.

Heat resisting aluminum paint, 7,000 gals. Bid No. 4-1214, Dec. 18, Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Sodium Hypochlorite solution, 7,100 1-gal. bots. Bid No. 294, Dec. 18, U. S. Navy Purchasing Office, 3rd Ave., 229th St., Brooklyn 32, N. Y.

Sodium Silicofluoride, 120,000 lbs. Bid No. 926 GW, Dec. 23, Procurement Div. Panama Canal Co. 21 West St., New York 6, N. Y.

White Lead, basic carbonate paste, type C-5, 20,000 lbs. Bid No. 4-1245, Dec. 16, Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

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Jobs & People

Acheson Colloids Company, Port Huron, Mich.—**Herbert M. Schneider** has been made coordination engineer for Acheson's manufacturing and production engineering.

American Agricultural Chemical Company, New York—**Joseph Padar** has become chief chemist of AAC's chemical control laboratory at Danville, Ill., serving the Danville and Seymour, Ind., fertilizer plants. **J. W. Grooms,** formerly with the Savannah, Ga., fertilizer sales office, has been made assistant manager of fertilizer sales at Greensboro, N. C.

American Cyanamid Company, New York—**Rollin P. Fisher,** Cyanamid's manager of labor relations since 1951, has been named manager of the company's personnel relations department, succeeding **Murray Owen,** who has been appointed assistant to the general manager of the general services division.

Arabian American Oil Company, Dhahran, Saudi Arabia—**Norman Hardy,** Aramco's executive vice-president, has been elected president, director and chief administrative officer of the company, effective January 1. He succeeds **R. L. Keyes,** who is retiring. **F. A. Davies** continues as Aramco board chairman and chief executive officer.

Archer-Daniels-Midland Company, Minneapolis, Minn. — **William A. Baker,** manager of ADM's San Bruno, Calif., sales office, has been elected a director of Applied Radiation Corporation, Walnut Creek, Calif., a producer of linear electron accelerators in which ADM has a financial interest.

Bakelite Company, division of Union Carbide Corporation, New York—**W. C. Quinby** has been made assistant sales manager of Bakelite's flexible packaging materials.

Borden Company, New York—**Joseph H. Kiernan** has been named product manager of its "Placco" brand building materials by the coatings and adhesives department of Borden's chemical division. **David F. Lowry** has been made manager of the new products department in the chemical division's Polyco-Monomer department.

Chemstrand Corporation, Decatur, Ala.—**Clarence E. Heiserman** has been named to the newly-created post of senior section head in charge of pilot plant activities at Chemstrand's research and development center in Decatur.

Chesebrough-Pond's, Inc., New York—**Andrew A. Lynn** has been named to the new post of domestic marketing vice-president by Chesebrough-Pond's.

Clayton Corporation, St. Louis, Mo.—**W. Earl Graham** has been made Clayton's eastern manager.

Continental Oil Company, Houston, Tex.—**V. F. Beyer,** director of Bryton sales, has been appointed by Conoco to the newly-created post of director of petroleum sulfonate sales, with headquarters in New York. **J. W. Jackson,** sales manager for the company's Sherwood refining division, has been named director of sales administration, a new position. He will continue to work out of Englewood, N. J. **V. F. Kavanagh,** eastern sales representative, has been made director of detergents sales, a new job, with headquarters in New York. **D. G. Schreck,** domestic sales manager of the Sherwood refining division, has been appointed to the newly-created post of director of white oil and petrolatum sales, with headquarters at Englewood. **R. S. Mooney,** Conoco technical sales representative, has been named director of sales promotion in New York, a new position. **S. W. Harris,** midwest sales representative, has become Chicago regional sales manager, another new job. **H. G. Greene,** Englewood district sales manager, has been made regional sales manager at Englewood.

Dow Chemical Company, Midland, Mich.—**Louis P. Butenschoen,** formerly Dow's manager of solvents sales, has been added to the staff of its distribution and traffic department. **Russell H. Ashworth** has been appointed supervisor of Dow agricultural chemicals for the Detroit, Mich.; Cleveland and Cincinnati, Ohio, and Pittsburgh, Pa., offices. **Walter C. Dutton,** formerly an assistant director of agricultural chemicals research for the company and a Dow consultant for the past three years, has retired after twenty-one years of service with the firm.

Emery Industries, Inc., Cincinnati, Ohio—**John A. Condon, jr.,** has been appointed textile chemical sales representative for the New England area by Emery's organic chemical sales department.

Fritzsche Brothers, Inc., New York — **Hans P. Wesemann,** Fritzsche's vice-president in charge of sales, was honored recently at a luncheon given in his honor on Mr. Wesemann's fortieth anniversary with the aromatic chemical and essential oil firm.

General Electric Company, Waterford, N. Y.—**Harold W. LeBoeuf** has been named manager of intermediates operations and **Richard D. Rice** has been made manager of rubber and polymer operations for GE's silicone products department.

Glidden Company, Cleveland, Ohio—**LeRoy S. Fulton** has been made executive assistant to A. D. Duncan, Glidden vice-president and general manager of the firm's paint division.

B. F. Goodrich Chemical Company, Cleveland, Ohio — **Glenn Robert Moore** has been assigned to Goodrich Chemical's development center at Avon Lake, Ohio, as a project engineer. **Harold E. Bechtold, jr.,** and **Theodore W. Hummel** have been appointed plastic materials sales representatives in Los Angeles and New York, respectively.

Goodyear Tire & Rubber Company, Akron, Ohio—**G. C. Zwick** has been appointed special field representative for Goodyear's chemical division, with headquarters in Chicago.

Koppers Company, Pittsburgh, Pa.—**John D. Jones** has been made manager of the industrial relations section in Koppers' tar products division. **Dr. Alfred R. Powell,** special adviser to the Koppers research department, this week will receive the 1957 Pittsburgh award of the American Chemical Society's Pittsburgh section.

Eli Lilly & Co., Indianapolis, Ind. —**Dr. Jack Mills** has been appointed a research adviser by Lilly. **Dr. Richard S. Griffith** has become senior physician, and **Dr. Robert L. Mann** has been made research associate.

Michigan Chemical Corporation, St. Louis, Mich.—**Dr. Donald E. Overbeek** has been added to Michigan Chemical's research staff.

Monsanto Chemical Company, St. Louis, Mo.—**Ben S. Smith,** director of industrial relations for Monsanto's Lion Oil Company Division at El Dorado, Ark, has been appointed personnel research manager for the company at St. Louis.

Union Carbide Chemical Company, a division of Union Carbide Corporation, New York—**Arthur P. Moss** has been named works manager of Union Carbide Chemicals.

Vulcan Containers, Inc., Bellwood, Ill.—**Lawrence M. Ferguson** has been made sales vice-president of Vulcan Containers.

Alan Wood Steel Company..... 52
Allied Chemical & Dye Corporation, Nitrogen Division 44
American Firstoline Corporation..... 43
American Flange & Manufacturing Co., Inc.. 11
American International Products..... 57
American Zinc Sales Company..... 37
Apex Chemical Co., Inc..... 68
Argueso, M., & Co., Inc..... 68
Armour & Company..... 69
Armour Laboratories, The..... 57
Ashcraft-Wilkinson Co..... 45

Baker, J. T., Chemical Co.....1, 2
Barclay Chemical Company, Inc..... 74
Barrett Division, Allied Chemical & Dye Corporation 50
Berkshire Chemicals, Inc..... 42
Better Finishes & Coatings, Inc..... 40
Bios Laboratories, Inc..... 61
Blockson Chemical Company..... 42
Bonewitz Laboratories, Inc..... 56
Bower, Henry, Chemical Mfg. Co..... 44
Bowman, Charles, & Co..... 36
Brill Equipment Company..... 71
Brode Corporation, The..... 70

Celanese Corporation of America, Chemical Division 22, 76
Chemical & Process Machinery Corp..... 73
Chemical Service Corp..... 74
Chemical Solvents, C. P., Incorporated..... 76
Chemical Specialties Co., Inc..... 59
Chemsol, Inc..... 74
Ciba Company, Inc..... 52
Columbia Pulverizing Co..... 61
Columbia Southern Chemical Corporation.. 40
Consolidated Products Company, Inc..... 71
Consulting Chemists and Engineers..... 58
Cornwell Chemical Corp..... 76
Coupe, Robert A..... 42
Crosby Chemicals, Inc..... 64

Darlington Chemicals, Inc..... 59
Dawe's Laboratories, Inc..... 59
Dickinson, J. Q., & Co..... 59
Diehl, William, & Co..... 70
Distillation Products Industries, Div. of Eastman Kodak Company..... 39
Dixon Chemical & Research, Inc..... 8
Dodge & Olcott, Inc..... 63
Dow Chemical Company, The..... 51

Dragoco, Inc..... 63
Drum Parts, Inc..... 52
Dunkel, Paul A., & Company, Inc..... 66
DuPont de Nemours, E. I., & Co., (Inc.) 1, 27, 51

Eastman Chemical Products, Inc.....19, 65
Emery Industries, Inc..... 68
Equipment Clearing House, Inc..... 73
Esso Standard Oil Company..... 30

Fairmount Chemical Co., Inc..... 42
Farchan Research Labs..... 61
First Machinery Corp..... 72
Fisher Chemical Co., Inc..... 76
Florasynth Laboratories, Inc..... 62
Fritzsche Brothers, Inc..... 62

Gane & Ingram, Inc..... 59
Gelb, R., & Sons, Inc..... 73
General Chemical Division, Allied Chemical & Dye Corporation..... 29
General Equipment & Trading Co..... 66
General Magnesite & Magnesia Co..... 42
Glidden Co., The, Chemicals, Pigments, Metals Division..... 66
Golwynne Chemicals Corporation..... 70
Grace Chemical Company..... 65
Greeff, R. W., & Co..... 20
Gross, A., & Company..... 70

Halby Chemical Co., Inc..... 44
Hall, C. P., Co., The..... 61
Harchem Division, Wallace & Tiernan, Inc.. 68
Heat and Power Co., Inc..... 71
Henry, J. F., Chemical Co., Inc..... 41
Hercules Powder Company, Incorporated 47, 52
Heyden Newport Chemical Corporation.... 55
Hoffmann-La Roche, Inc..... 54
Hooker Electrochemical Company..... 43
Huisking, Chas. L., & Co., Inc..... 55
Hutchinson, D. W., & Co., Inc..... 62

Imperial Paper & Color Corporation..... 66
Inland Steel Container Company..... 49

Jefferson Chemical Company, Inc..... 21
Jefferson Lake Sulphur Company..... 51
Jones & Laughlin Steel Corporation..... 28

Kolon Trading Co., Inc..... 63

Lawler Company..... 73
Lever Brothers Company..... 46
Lindsay Chemical Company..... 61
Loeb, H., & Son..... 73
Loeb Equipment Supply Co..... 72
Lucidol Division, Wallace & Tiernan, Incorporated 46

Machinery & Equipment Co., Inc..... 72
Machinery & Equipment Corp..... 73
Magnus, Mabee & Reynard, Inc..... 6
Mallinckrodt Chemical Works..... 15
Mantrose Corporation, The..... 64
Mathieson Chemicals, Olin Mathieson Chemical Corporation..... 35
Meer Corporation..... 57
Metasap Chemical Company..... 67
Michigan Chemical Corporation..... 23
Midland Storage, Inc., The..... 69
Montrose Chemical Company..... 20
Mutual Chromium Chemicals, Solvay Process Division 31
Mutual Citrus Products Company..... 24

National Aniline Division, Allied Chemical & Dye Corporation..... 17
National Milk Sugar Company..... 46
Neville Chemical Co..... 76
New York Quinine & Chemical Works Inc... 6

Old Dutch Mustard Co., Inc..... 63
Olin Mathieson Chemical Corporation Industrial Chemicals Division..... 35
Oronite Chemical Company..... 33
Osborn, C. J., Co..... 66

Penick, S. B., & Company..... 56
Pennsalt Chemicals Corporation, Industrial Division 1
Pennsylvania Industrial Chemical Corp.... 67
Perry Brothers, Inc..... 67
Perry Equipment Corp..... 72
Petro-Tex Chemical Corporation..... 13
Phelps Dodge Refining Corporation..... 41
Philipp Brothers Chemicals, Inc..... 43
Pittsburgh Coke & Chemical Co..... 53
Polak's Frutal Works..... 62
Prentiss Drug & Chemical Company, Inc.... 59

Prior Chemical Corporation..... 1
Process Plants Service, Inc..... 73
Procter & Gamble Co..... 46
Publicker Industries, Inc..... 10

Rambach Chemical Company..... 74
Raney Catalyst Co..... 47
Read, Chas. L., & Co., Inc..... 40
Reinhart Chemical Corporation..... 53
Riches-Nelson, Inc..... 76
Richter, Gedeon Pharmaceutical Products, Inc. 59
River Plate Corporation, The..... 70
Robeco Chemicals, Inc..... 76
Ross, Frank B., Company..... 70
Roussel Corporation..... 59

Shea Chemical Corporation..... 44
Standard Collapsible Tube Co..... 65
Standard Drug Company, Inc..... 57
Stauffer Chemical Company..... 18
Stein Equipment Co..... 72
Strohmeyer & Arpe Co..... 70
Sunkist Growers, Inc..... 26

Tennessee Products & Chemical Corporation 12
Thurston & Braidich..... 62
Tombarel Products Corporation..... 63
Turner, Joseph, & Co..... 66

Union Carbide Chemicals Company, Division of Union Carbide Corporation..... 1
United Box & Lumber Co..... 42
U. S. Borax & Chemical Corporation Pacific Coast Borax Company Division..... 1
U. S. Industrial Chemicals Company, Division of National Distillers & Chemical Corporation 28a
United States Potash Company Division of U. S. Borax & Chemical Corp..... 45
U. S. Steel Products Division, U. S. Steel Corporation 32

van Ameringen-Haebler, Inc..... 63

Warwick Wax Company, Inc..... 14
Welch, Holme & Clark Company, Inc..... 63
Western Condensing Co..... 25
Wyandotte Chemicals Corporation..... 44

Ziegler, G. S., & Company..... 67
Zink & Triest Co..... 62
Zinsser & Company, Inc., Subsidiary of The Harshaw Chemical Co..... 48

Advertisers Index

Chemical Industry in India Set to Boom

—Continued from page 7

ports, a recent statement of the Minister of Industry, indicates the possibility of greater activities in this field.

In some cases, existing capacity can only be utilized partially. That is because of such limitations as supply and demand problems, lack of adequate transportation, and rising freight rates. There are some other limitations: Reliance on imported sulfur, insufficient use of byproduct chlorine, and the reluctance of farmers to use chemical fertilizers.

The country is not neglecting the scientific training side of the plan, either. The Council of Scientific and Industrial Research is to establish a network of regional laboratories. It is also proposed to set up new institutes of science and technology. Much greater emphasis on technical and administrative training is needed if the industrialization program is to progress at a faster rate, it is pointed out.

Although United States chemicals often are competitive in price, restrictive import policies and a preferential commonwealth tariff of 10 percent less on some items prevent their importation in quantity, except for a few products, such as sulfur, selenium and phosphate rock, according to research information from the Business and Defense Services Administration.

Despite uneasiness about possible nationalization plans and more attractive investment opportunities elsewhere, American business interests are participating increasingly in the Indian economy.

Polystyrene Plant in Bombay

Among new enterprises is a polystyrene plant established in Bombay by a United States company in collaboration with Polychem, Ltd. The National Carbon Company's plans for expansion include construction of a new plant to manufacture polyethylene and certain chemicals, it is reported. However, the general trend of American participation in Indian enterprises appears to be more toward providing technical knowledge and processing technics rather than supplying capital.

A sharp decline in India's foreign exchange holdings and the need for more capital for economic development seem to have effected a change in the government's attitude toward foreign investment, such as waiving the requirement that the majority interest in ownership and effective control of a joint undertaking should remain in Indian hands.

However, Indian chemical manufacturers have strongly advocated refusal of government permission to foreign firms to establish chemical plants in India, an attitude considered an impediment to the flow of capital from abroad. In enterprises in which foreign capital currently predominates, a greater participation of Indian interests may be demand when expansion is contemplated.

The government also expects adequate provision for training Indian personnel for technical and administrative posts in businesses in which foreign capital is involved. Frequently, such a provision is made a condition to approval of foreign investment plans. Royalty agreements also are subject to certain restrictions.

The various official development councils were reorganized in 1956, but so far there has been no indication that they are taking a much more active role in industry.

Their functions include the establishment of target figures and the coordination of production programs, the suggestion of measures for obtaining fuller utilization of capacity and improving less efficient units, and standardization and promotion of labor welfare.

The government has also appointed a panel to study the development of the power-alcohol industry.

State Unit Import

The State Trading Corporation, established in 1956, is authorized to trade in any commodity with foreign countries as it sees fit and also to participate in the distribution of commodities on the domestic market. It has been entrusted with the importation and distribution of soda ash and caustic soda. No details of contracts entered into by the corporation with foreign suppliers are available.

An export promotion council for chemicals and allied products has been proposed, to be composed of selected government officials, representatives of manufacturers and traders, and others generally interested in exporting. Functions would include the study of foreign market trends and consumer preferences, the sending abroad of trade missions, and the appointment of representatives in foreign countries to collect and disseminate to Indian exporters statistical and other information regarding chemical export trade.

Because of the heavy foreign exchange requirements of the Second Five Year Plan and in an effort to foster development of the domestic chemical industry, the government has tightened its control over imports. Only commodities considered absolutely essential to the economy are permitted to be imported.

Transportation An Obstacle

Inadequate transportation facilities are a major obstacle to the advancement of the Indian chemical industry; both raw materials and finished products are involved. Lack of transportation prevents greater coordination of the industry and results in too many small units, which makes for uneconomic production and high costs.

High freight rates and insufficient allotments of cars and special tanks for soda ash, liquid chlorine, and sulfuric acid are other unfavorable aspects of the situation.

Although great efforts are being made during the Second Plan period to overcome these difficulties, the transportation problem is expected to continue for a long time and to remain a serious bottleneck to the chemical industry.

The Minister of Heavy Chemicals is reported to favor some dispersal of industry and to consider regional economic development of great importance in India's industrialization program.

Gov't Views

—Continued from page 3

granted. Leaders are inclined to doubt that congress will give the added tariff cutting authority, and also may limit the extension of the law to only one or two years. The last three-year extension was granted by the house, where the tariff legislation must originate, only by the narrowest of margins, and only after the administration agreed to certain changes in the law intended to provide added safeguards to domestic industry.

The authority to cut tariffs 5 percent a year for the next five years, which is to be proposed by Mr. Eisenhower, differs from the tariff cutting authority contained in the last extension law in this material respect: the authority to cut the tariffs would not automatically lapse if not used each year.

When the three-year extension was last granted along with the authority to reduce tariffs by 5 percent, the reductions had to all be made during the first year of the expansion in order to be fully effective. They then became effective at the rate of 5 percent a year. The proposal to be advanced next session would not make it necessary to negotiate the reductions in the first year of the extension in order to get the full benefit of the tariff cutting authority, but any reductions made would not amount to more than 5 percent a year.

Atomic Secrets

—Continued from page 7

won thirty-five Nobel Prizes in science; Russia's grand total is two."

Mr. Hull called also for support of the administration's mutual aid program, increased expenditures for basic research and greatly accelerated efforts by individuals and groups to enhance the study and teaching of science in our schools and universities.

He used activities of the Manufacturing Chemists' Association as an example of what already is being done by industry to meet this problem. The MCA, he pointed out, two years ago began a million-dollar program of aid to education .The Association provides student-teacher aids on request to junior and senior high schools, presents six annual awards of $1,000 each to college chemistry professors who have contributed to their profession through the years, and currently is producing motion pictures as additional teaching aids. The materials already are being used by 9,000 junior high schools and 6,000 senior high schools, he added.

Beryllium Plant Gets Some Help From Goodrich

The world's major commercial producer of beryllium, the metal which may soon begin playing an important role in this country's atomic aircraft and guided missile programs, will meet a January 1 initial production date at its new plant with an assist from B. F. Goodrich Industrial Products Company, Akron, Ohio.

Everything is in readiness for the target date when Brush-Berryllium Company's $4.5 million Elmore, Ohio, plant will begin producing the first of 500,000 pounds of the metal under a five-year contract agreement with the federal government.

The first billets of pure beryllium from the new plant will be delivered to the Atomic Energy Commission, which has long-recognized the metal as an "old reliable."

At the Elmore plant, beryl ore will go through a series of Brush-developed chemical and metallurgical processes in tanks rubber lined by B. F. Goodrich Company. In all, fifty-six of the maze of tanks to be used at Elmore were lined exclusively by the Akron rubber company.

Because of the corrosive nature of the process liquids, rubber lining, "tailor-made" for each liquid, was necessary in most of the tanks, which varied in size from 16x11 feet to 3x3 feet. Each of the tanks was designed, fabricated and rubber lined for maximum efficiency.

Chemists' Club Prints

—Continued from page 7

out, had published its last history on its fiftieth anniversary in 1948.

"But the Chemists' Club is not like most clubs," he emphasizes. The great growth of the organization since 1948 he attributes to the growth of the science of chemistry and the chemical industries in the New York area and across the nation.

The book is paper-bound, contains sixty-six pages, and is six and one-half by ten inches in size. It was published for the club by Peter Pauper Press. It is illustrated by George Hollrock.

The club was founded in 1898, when the New York area housed a greater number of chemists and more of the chemical industry than any other section of the country.

It was incorporated on December 6 of that year. It had an initial membership of 154, and an annual budget of $3,300.

During the ensuing years, the club has grown in both membership (currently 3,234) and scope. It boasts one of the world's finest chemical libraries.

Mr. Killeffer's history of the club covers its origin, its property acquisition, its activities and membership growth.

The author is also careful to delineate the human values and personalities which have underpinned the growth of the club and the progress of the chemical industry.

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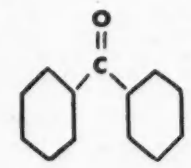

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